

**MACKINAC STRAITS CORRIDOR AUTHORITY  
PUBLIC MEETING**

February 3, 2021 – 1:00 pm

Virtual Meeting (<https://livestream.com/mdot/mscameeting02032021>)

**MEETING MINUTES**

Members Present:     Mike Nystrom, MSCA  
                               Anthony England, MSCA

Members Absent:     None

Also Present:         Raymond Howd, Assistant Attorney General to MSCA  
                               Dr. Mike Mooney, Consultant to MSCA  
                               Michael Bagale, Enbridge  
                               Peter Holran, Enbridge  
                               Charles Drayton, Enbridge  
                               Aaron Dennis, Enbridge  
                               Paul Turner, Enbridge  
                               Mike Moeller, Enbridge  
                               Jennifer Downs, Enbridge  
                               Monica Monsma, MDOT  
                               James Lake, MDOT  
                               Corey Petee, MDOT  
                               Ruth Clark, MDOT  
                               Ryan Mitchell, MDOT

**I.     WELCOME**

Monica Monsma opened the meeting at 1:02 p.m. and welcomed attendees and guests.

Mackinac Straits Corridor Authority (MSCA) Chairman Michael Nystrom introduced himself and welcomed attendees to the meeting. MSCA Member Dr. Anthony England introduced himself, stating he was attending from Superior Township, Washtenaw Co. MI.

**OPENING STATEMENT/INTRODUCTION**

Chairman Nystrom stated the Responsibility of the authority:

As the MSCA is relatively new and its role is not always clear, the legislation that created this authority requires the Authority to review and oversee construction, maintenance, and operation of utility tunnel under the Straits of Mackinac. The purview of the Authority is to represent the interests of the State of Michigan to ensure that if permitted, the tunnel will be designed, constructed, operated, and maintained in accordance with state of the industry standards and to ensure its safety.

Chairman Nystrom outlined the virtual meeting public comment function, stating that many comments have been received in advance of the meeting and reviewed by the

Authority. Meeting related information was posted in advance on our website and made available publicly. A public comment form was made available for use. All comments sent before 11 am were provided to the Authority. Staff will read public comments during this meeting. All comments will be part of the public record of this meeting.

**II. REVIEW OF AGENDA**

Chairman Nystrom called for Motion to Approve Agenda. Motion by Anthony England. Seconded by Chairman Nystrom. 2 ayes, 0 nays. Motion carried.

**III. REVIEW OF PREVIOUS MINUTES**

Chairman Nystrom called for Motion to Approve March 6, 2020 Meeting Minutes. Motion by Anthony England. Seconded by Chairman Nystrom. 2 ayes, 0 nays. Motion carried.

**IV. OLD BUSINESS**

None.

**V. NEW BUSINESS**

1. Summary of MSCA role as Intervenor in the Michigan Public Service Commission (MPSC) proceedings on the Enbridge Application to relocate a segment of Line 5 into Tunnel –
  - a. Raymond O. Howd, Assistant Attorney General: Numerous parties have moved to intervene, including numerous environmental groups, tribal governments, AG, labor districts council, and the propane gas association. On August 5, 2020, the Authority filed a motion to intervene in these proceedings, indicating that the MSCA has a direct interest in ensuring all MPSC's requirements are met. Our role is to protect the public and ensure that design and construction are the highest quality. In October, the administrative law judge (ALJ) determined that the scope of the MPSC proceedings will include certain aspects of the tunnel, which will house the relocated Line 5. Testimony on leak prevention and construction materials will be presented. The ALJ did deny other intervenors' requests to consider effects of greenhouse gases and the need for future petroleum products. Certain Intervenor's appealed the ALJ ruling to the MPSC. Since the Governor and DNR revoked the 1953 easements currently used to transport Enbridge's products on the bottomlands of the Straits, and there is currently litigation between Enbridge and the Governor/AG on this issue, the MPSC remanded the motion in limine to the ALJ to reconsider what, if any, effect these actions might have on the scope of the PSC proceedings. The Parties have submitted briefs on remand and oral arguments will occur this Friday on whether the ALJ should reach a different result from its original ruling. On December 21 – the ALJ issued a revised scheduling order. Hearing is this Friday on Enbridge's motion in limine, and a ruling is expected late February. In March, appeals will be heard. Written Testimony of MSCA experts is due by May 18 that will cover their review of designs, plans and

specifications. Over the summer, opportunities will be allowed for Parties to rebut that written testimony.

- b. Member England asked about when the tunnel can be built. Mr. Howd responded that all permits must first be approved - Army Corps, EGLE, and MPSC.

**2. Consultant contract for As-Needed Tunnel Engineering Expert and Permit Review Services awarded to McMillen Jacobs Michigan, Inc.**

- a. Ryan Mitchell, attending from City of Dewitt, Clinton County, MI stated the contract is for extension of the State's limited resources, to ensure proper due diligence in evaluating submittals, providing tunnel engineering expertise independent of the design development, focusing on the technical aspects of design as it relates to the permit applications, and providing additional staff resources and expertise to support other affected agencies.

**3. Consultant contract for As-Needed Structural Design Engineering Services awarded to CDM Smith Michigan, Inc.**

- a. Ryan Mitchell stated this contract for Structural Design and Engineering consultant services is similar to the previous item in that it provides needed extension of staff resources to the effort of ensuring a robust review of the Project Specifications. This contract focuses on structural design, and provides the State needed expertise in Michigan concrete design and construction requirements and conditions.
- b. Chairman Nystrom called for Motion to Approve. Motion by Anthony England. Seconded by Chairman Nystrom. 2 ayes, 0 nays. Motion carried.

**4. Summary of Line 5 Replacement Utility Tunnel Project activity, progress, and status – Enbridge Energy**

- a. Peter Holran, Director of Government Relations for Enbridge, attending from Falls Church, Northern Virginia, gave an update of project related activities and community engagement efforts.

Michael Bagale, Project Director for Enbridge, attending from Harris County, Houston, Texas, provided a project update.

**5. Discuss any inquiries or written proposals received by interested Third-Party utilities – Enbridge Energy**

- a. Peter Holran stated Enbridge has been approached by a third-party utility with interest in locating in the tunnel. Peninsula Fiber Network based in Marquette, MI has expressed interest and discussions are ongoing regarding feasibility. One benefit noted is that PFN provides 911 services throughout the state and they are looking for redundancy in that system, which may be beneficial, to all of Michigan.
- b. Mike Moeller of Enbridge, attending from Lake County Indiana, City of Schererville stated Enbridge has continued to add resources - technical and

human to monitor and protect the pipeline in the straits, including new high power infrared cameras on both sides of the Straits; the Enbridge maritime pipeline protection program. Additionally, cameras were installed on each side include a xenon searchlight; which can be made available to first responders for search and rescue.

- c. Member England noted that MSCA doesn't have control or responsibility for Line 5 as it is now.

- 6. Expert tunnel engineering consultant for the Authority, Dr. Mike Mooney, attending from Riverside County, La Quinta, CA provided a detailed report, attached to these minutes.

**8. Procurement of Authority's Independent Quality Assurance (QA) Contractor.**  
Addressed by Mike Mooney:

- a. Dr. Mooney stated the Tunnel Agreement specifically requires independent quality assurance of the construction process, on behalf of the Authority, to be funded by Enbridge. This will be above and beyond Enbridge's planned quality assurance program. The role of the independent quality assurance contractor is to verify comprehensive quality assurance is achieved, and that project specifications are met, during construction. Dr. Mooney added that when Enbridge transfers ownership of the tunnel to the MSCA at completion, the QA consultant will assure the tunnel is constructed pursuant to the project design and specifications. He further stated that development of the independent quality assurance is ongoing; a natural extension of project specifications, that a draft RFP for these services is under development.
- b. Ryan Mitchell noted that MDOT routinely hires quality assurance contractors.

**VI. PUBLIC COMMENT**

Public comments were read by Monica Monsma, James Lake and Ruth Baker. Full text is attached to these minutes.

**VII. ADJOURN**

With no further business at hand, Chairman Nystrom called for Motion to Adjourn. Motion by Anthony England. Seconded by Chairman Nystrom. Motion Carried.

Meeting adjourned at 4:02 p.m.

Minutes taken by:  
Ruth Clark  
Transportation Planner  
MDOT Environmental Services Section

Approved: \_\_\_\_\_

Michael Mooney Consulting, LLC  
5706 McIntyre Street  
Golden, CO 80403

January 28, 2021

Michael Nystrom, Chairman  
Mackinac Straits Corridor Authority

Re: Summary of Great Lakes Tunnel Project Activity

Dear Chairman Nystrom,

I am writing to summarize key activities of the Great Lakes Tunnel Project (GLTP) for the time period March 1 to December 31, 2020. My summary will address (1) Enbridge submittals required per the Tunnel Agreement; (2) joint development of tunnel specifications; (3) design of the tunnel; and (4) independent quality assurance contractor.

## **1. Enbridge Submittals**

Per their April 30, 2020 submittal, Enbridge completed the activities identified in their Preliminary Engineering Activities Work Plan (PEAWP). Completion of PEAWP activities was required per Tunnel Agreement Section 7.5b by April 30, 2020 or 120 days after completion of the geotechnical investigations, whichever is later. The PEAWP itself was submitted Feb. 1, 2019 (deliverable #1 in Table 1 below).

Per document deliverable #7 from Enbridge, PEAWP activities included the following:

- Geotechnical investigations: including desktop study, lake bottom profile, geophysical surveys, and the gathering of geotechnical subsurface data along the proposed tunnel corridor through a boring, in-situ testing and laboratory testing program. ***Geotechnical investigations were carried out principally in 2019. I addressed these in my Feb 28, 2020 report.***
- Development of geotechnical data report (GDR): a compilation of information collected during the geotechnical investigations. ***Enbridge submitted a GDR as deliverable #6 (Table 1) in December 2019. An updated GDR, including additional laboratory test data, was submitted by Enbridge on March 31, 2020.***
- Initiated a geotechnical baseline report (GBR): a document that describes the anticipated 'baseline' geotechnical conditions along the tunnel alignment. ***The GBR was initiated and has since progressed along with design.***
- Project risk assessment: including risk workshops to identify potential project risks, develop risk mitigation strategies, and establish a process for continuous management of each risk. ***Enbridge has developed and maintains a risk register.***
- Assembling of a project specifications team and begin to develop project specifications. ***The project specifications team was identified (submittal #2) and joint development of specifications began thereafter.***

- Provide input into regulatory and environmental permit and approval applications. **Three major permit applications (Michigan Public Service Commission; Michigan Environment, Great Lakes, and Energy; joint to EGLE and US Army Corps of Engineers) were submitted by Enbridge in April 2020.**
- Further refine tunnel design aspects, including alignment, cross section, and north/south shore access locations and configurations. **Enbridge completed 30% design in March 2020, and have since progressed to 90% design.**

***I find that the PEAWP activities to be satisfactorily completed in accordance with the Tunnel Agreement.***

Table 1. Summary of Enbridge Deliverables Provided to the MSCA per the Tunnel Agreement

#	Deliverable	Due Date	Received by MSCA	Satisfactory?
1	Preliminary Engineering Activities Work Plan	Feb. 4, 2019	Feb. 1, 2019	Yes
2	Identify Project Specifications Team	March 1, 2019	Feb. 28, 2019	Yes
3	Draft Procurement and Contracting Execution Plan	April 30, 2019	April 30, 2019	Yes
4	Draft Procedures for Establishing Escrow Accounts	Sept 16, 2019	Aug. 30, 2019	No opinion <sup>1</sup>
5	Draft Request for Proposals	April 30, 2020	Aug. 19, 2019	yes
6	Geotechnical Data Report	Dec. 31, 2019	Dec. 23, 2019	Yes
7	Completion of Prelim Engineering Activities Work Plan	April 30, 2020	April 30, 2020	Yes

## **2. Joint Development of Tunnel Project Specifications**

MSCA acceptance of Tunnel ownership requires it to be constructed in accordance with the agreed upon Project Specifications. Per Tunnel Agreement Section 7.2, Enbridge and the MSCA identified members of a team to jointly develop the Project Specifications related to design and construction of the tunnel. The team was identified in deliverable #2 (Table 1). The Tunnel Agreement states that the jointly developed Project Specifications pertaining to the tunnel are to be submitted to the MSCA for approval.

Project Specifications include the technical requirements for the tunnel as well as construction specifications. The technical requirements convey performance requirements such as design service life, allowable water infiltration limits, tunnel-induced settlement limits, noise and vibration limits, etc., as well as design requirements as stipulated in the Tunnel Agreement, e.g., minimum diameter, structural liner, accommodation of third-party utilities, prevention of any pipeline liquids leakage into lakebed or Straits. The technical requirements also identify the prevailing codes and standards to be adhered to during design, e.g., various American Concrete Institute (ACI) code sections, American Association of State Highway and Transportation Officials (AASHTO) Tunnel Design Guide, International Tunneling Association (ITA) guidelines, National Fire Protection Association (NFPA) codes and standards, etc.

The jointly developed tunnel Project Specifications include nine construction specification sections that pertain to the permanent tunnel structure that the MSCA will ultimately assume ownership of per the Tunnel

<sup>1</sup> Satisfactory per assessment by Ryan Mitchell (MDOT)

Agreement. The nine jointly developed Project Specification sections and key contents of each are summarized in Table 2.

Table 2. The Nine Sections of Jointly-Developed Tunnel Project Specifications

<p><b>Structural Concrete Materials</b></p> <p>Specifies: cementitious materials and aggregates to be used in concrete mixes for all concrete structures except precast concrete tunnel lining (PCTL); performance criteria for various mixes; delivery, storage, handling requirements; quality control sampling, testing and acceptance requirements; document submittals by contractor; qualifications of material and ready-mix concrete manufacturers.</p>
<p><b>Cast-In-Place Concrete</b></p> <p>Specifies cast-in-place concrete, including formwork, reinforcement and finishes for diaphragm walls and capping beams, slabs-on-grade, drilled shafts, and miscellaneous works. Includes: qualifications for ready-mix manufacturers, installers, welders, testing agencies; material requirements including steel reinforcement; field condition guidelines; formwork materials and installation; concrete placement, finishing and curing; repair materials and methods; quality control sampling, testing and acceptance requirements.</p>
<p><b>Precast Structural Concrete</b></p> <p>Specifies requirements for precast sump roadway units to be installed in the center deep section of the tunnel. Includes: qualifications of precast fabricator/manufacturer, installer, field auditor; structural performance criteria; requirements for steel reinforcement, connectors, molds and grout materials; fabrication requirements including dimensional tolerances and finishing; installation guidelines; repair procedures and criteria; quality control inspection, sampling, testing and acceptance requirements.</p>
<p><b>Precast Concrete Tunnel Lining</b></p> <p>Specifies the requirements for manufacturing, handling, transporting and installing the gasketed precast concrete tunnel lining (PCTL) segments that form the permanent tunnel structure for the 99 year design service life. Includes PCTL mix design requirements and performance criteria; steel rebar and steel/poly fiber requirements; qualifications for PCTL and materials manufacturers, independent testing laboratories; material certifications; dimensional tolerances; document submittals by contractor; segment casting, curing, and transporting requirements; damage criteria, and repair materials and procedures; quality control sampling, testing and acceptance requirements; segment tracking and record keeping.</p>
<p><b>Sealing Leaks</b></p> <p>Specifies requirements for minimizing water infiltration from leaks through tunnel and shaft/portal concrete. Includes: workplan submittal requirements; qualification requirements for personnel; crack sealing product performance requirements; methodologies for sealing cracks, joints, grout sockets; quality control and record keeping requirements.</p>
<p><b>Excavation by Tunnel Boring Machine</b></p> <p>As related to permanent tunnel structure, specifies the installation of PCTL and placement of annular backfill grout between the excavated ground and exterior of PCTL. Includes: lining ring erection and assembly procedures and requirements, segment handling and transport, methods for correct positioning and measurement; backfill injection system requirements; lining monitoring and control; segment documentation requirements; qualifications for segment installer, TBM operators; thrust jack load limits on segments; water infiltration criteria; as-build tunnel lining survey.</p>



**Backfill Grout**

Specifies requirements for performing annulus backfill grouting between exterior of PCTL and excavated ground, ensuring continuous contact of PCTL with surrounding ground. Includes: qualification requirements for grouting manager, testing laboratory and testing personnel; grout material requirements; grouting equipment and measurement system; grout mix design criteria and material requirements; grouting procedures; verification testing requirements; inspection and test plan requirements.

**Bored Piles**

Specifies requirements for bored piles (cast in place drilled shafts) to be used at the shaft/portal areas, including qualifications for bored pile contractor, design engineer, supervisor and testing agency; trial concrete mixes; material performance requirements; excavation procedures and tolerances; steel reinforcement and concrete placement; quality control inspection and test plan requirements.

**Diaphragm Walls**

Specifies requirements for cast-in-place concrete walls (diaphragm walls) that will constitute the shaft and portal structure walls on the north and south shores. Includes: requirements for detailed work plan and design drawings; concrete and slurry fluid support performance requirements; equipment requirements; qualifications requirements for diaphragm wall contractor, engineer, special inspector; excavation; inspection and test plan requirements; field quality control reporting; corrective action;

**Earthwork Excavation and Backfill**

Specifies requirements to excavate soil and rock for shaft/portal construction and to construct embankments/fills for north and south shore structures. Includes blasting requirements, controls, and safety protocols; inspection and test plan requirements including documentation; earthwork compaction criteria; qualifications requirements for blasting and earthworks personnel; requirements for earthwork materials, geotextile, flowable fill and explosives; procedures for dewatering, blasting, excavation and backfilling.

Together with Enbridge and their consultants, a select group of MDOT engineers and consultants, hereafter MSCA Joint Specifications team, jointly developed the nine Project Specification sections throughout 2020 on behalf of the MSCA. MSCA Joint Specifications team members included myself, Ryan Mitchell, Manager of MDOT Innovative Contracting, Matt Chynoweth, MDOT Chief Bridge Engineer, as well as consultants Ihab Darwish, Senior Project Manager at Alfred Benesch & Company, and Mahmoud Khwaja, Tunnels National Discipline Leader with CDM Smith, who participated in the 90% and 95% level review.

The MSCA Joint Specifications team worked with tunnel designer of record Arup during development of the nine tunnel Project Specifications sections. These nine sections built upon the preliminary Project Specifications established in the designer RFP and construction services RFP (deliverable #5 in Table 1).

MSCA Joint Specifications team involvement occurred via a formal comment resolution process that is standard of practice for infrastructure construction projects. The process proceeded as follows:

- Enbridge's tunnel designer of record Arup prepared each draft of the nine Project Specification sections at the 60% design level.
- The MSCA Joint Specifications team conducted a detailed review of the nine sections to insure accordance with tunnel construction best practice and Michigan infrastructure construction practice.
- The MSCA Joint Specifications team submitted point by point written comments to each specification section requesting additions, modifications, deletions and clarifications.
- Arup addressed each comment by written response, e.g., accepting the comment and modifying the specification language, answering the query, explaining the rationale, etc.
- The MSCA Joint Specifications team reviewed each comment response. Comments were closed if the response was deemed acceptable; comments were continued/elaborated if further discussion or action was required.
- Arup prepared 90% design level versions of each of the nine Project Specifications, incorporating MSCA comments and other specification advances that stemmed from furthering their design. The comment resolution process described above was then repeated. A similar process was performed for 95% level specification sections.

Joint specifications development began with a full team kickoff workshop in late March 2020. Beginning in July, the MSCA Joint Specifications team met via conference call weekly to discuss individual reviews, comments and responses. We also met with Enbridge and its consultants (Arup, WSP) weekly via conference call to further the development and finalization of the nine jointly developed Project Specification sections. Overall, the MSCA Joint Specifications team submitted nearly 400 comments to the nine Project Specification sections. Each comment was satisfactorily resolved. I understand there was also a detailed progressive Project Specifications review and comment process involving Enbridge's owners engineer WSP, construction services contractor Great Lakes Tunnel Constructors (GLTC) and other Enbridge consultants. The MSCA Joint Specifications team saw the results of this captured in updated Project Specification sections.

I note here a few caveats to the jointly developed Project Specifications. First and as stated above, the jointly developed Project Specifications extend to nine sections that relate to the permanent tunnel and shaft/portal civil/structural infrastructure. Per the Tunnel Agreement, the MSCA Joint Specifications team did not participate in the development of pipeline specifications, Enbridge building specifications or mechanical, electrical, plumbing specifications. The MSCA team scope extended only to those infrastructure assets that the MSCA will assume ownership of. Second, the MSCA Joint Specifications team effort did not extend to a detailed design review or design verification. Per the Tunnel Agreement, the design is Enbridge's responsibility. I discuss Enbridge's independent design review process below. Third, the Joint Specifications will go hand in hand with an issued-for-construction (IFC) drawings set. The MSCA Joint Specifications team review of drawings was completed through the 90% design level. To my understanding, Enbridge will complete and make available IFC drawings during the first half of 2021. Finally, there will be a general section of Project Specifications language that collects common terms, conditions, definitions, etc. to all Project Specification sections, and defines the quality management requirements. Examples of this include the general requirements for Inspection and Test Plans, required adherence to Enbridge policies on quality management, and definitions of Independent Testing Agency. Joint effort on this Project Specification language is ongoing. This language ties into the final development of an agreement between Enbridge and the construction contractor that, to my understanding, is

scheduled for the first half of 2021. We as the MSCA Joint Specifications team will participate in this aspect to completion.

Subject to these caveats, I find the jointly developed tunnel Project Specifications to be comprehensive, detailed and consistent with standards of practice in tunnel design and construction. Taking the precast concrete tunnel lining (PCTL) specification section as an example, all appropriate codes and standards are identified, and are consistent with those established in the RFPs. The performance requirements in the Tunnel Agreement, e.g., 99 year design service life, minimum 10 ft inner diameter, are captured in the specification language and associated drawings.

There were two modifications in technical requirements made from preliminary specifications (RFP stage) to final specifications. First, the maximum overall water infiltration limit was modified from 5000 gallons per day (RFP preliminary specifications) to 7000 gallons per day. The 5000 gallons per day limit a considerably smaller inside diameter tunnel per the Tunnel Agreement while the designed tunnel is 21 ft inside diameter. The increase to 7000 gallons per day is primarily due to the increased surface area resulting from the increase in diameter. Second, a 3 inch minimum concrete cover thickness was listed in the RFP preliminary specifications. However, the required concrete cover thickness is determined during durability analysis/design, and is specified based on that outcome. Accordingly, the concrete cover thickness specified in the drawings is a result of the durability design that itself meets the 99 year service life requirement of the Tunnel Agreement.

### **3. Design Process**

Enbridge and its consultants, namely designer of record Arup and owner's engineer WSP, have been carrying out detailed design of the tunnel and north/south shore shaft/portal structures throughout 2020. Design was completed to 30% level in March 2020, 60% in July 2020 and 90% in October 2020.

In compliance with Tunnel Agreement Section 7.6, Enbridge provided me with access to observe the design process in the following ways: (1) Access to a secure digital documents website, through which I have been able to view design documents and drawings. (2) Access to join, via web conferencing, review meetings hosted by Enbridge that were conducted after 30% and 60% design. A 90% design review is planned in the coming weeks. These review meetings involved design review and value engineering efforts carried out by Enbridge and their consultants. (3) I have joined weekly GLTP calls where Enbridge, WSP, Arup and GLTP address a variety of engineering design, construction and process issues to advance the project.

Enbridge also shared their independent design review process with the MSCA Joint Specifications team. Arup, as the designer of record, has a design quality management process that involves design coordination, design checks and design reviews. Design coordination includes 3D model reviews, clash reports, and drawing review sessions. Design checks involve checks on analysis and design calculations by engineers not working on the primary design. Design reviews are performed by independent senior discipline engineers and subject matter experts, both internal and external to Arup, to challenge means and methods, review design checks, and

highlight details requiring careful attention. Beyond this, WSP as Enbridge's owner's engineer, performs detailed technical reviews that includes evaluating all tunnel and pipeline designs. In addition, Enbridge reviews all design deliverables internally and has hired external tunnel technical advisors, e.g., Erika Moonin & Associates, to review design outputs and construction means and methods. The construction services contractor GLTP also provides constructability analysis and reviews throughout design. The project uses 30, 60 and 90% design reviews and a detailed comment resolution log, both of which are industry standard processes for tunnel design.

Despite the pandemic-forced shut down of travel, my access to the design process has been sufficient to meet the intent of the Tunnel Agreement. Moreover, the design has progressed from preliminary conceptual level at the beginning of 2020 to near final detailed design and IFC drawings. I have been able to keep abreast of the design process and decisions, the rationale behind decisions, the value engineering efforts, and supporting documents. I am currently reviewing 90% design documents and will participate in Enbridge's upcoming 90% design review meetings. To my understanding, final design will be completed in the first quarter of 2021.

The design process in my view has been and is being rigorously conducted. Arup has involved their key experts from around the world in the design, and has incorporated external subject matter experts for some of the particularly challenging aspects, e.g., high groundwater pressure, face stability with reduced pressure, ground characterization, etc. The design review by WSP and Enbridge's external tunnel advisors adds a layer of assessment that is extremely valuable. While I have not been privy to all aspects of these design reviews, I am confident this is benefitting the project and meeting the project's design needs.

Another critically valuable aspect of the design process has been the early involvement of the pre-construction services contractor GLTC (Obayashi and Jay Dee) and the tunnel boring machine (TBM) manufacturer Herrenknecht. The various constructability analyses carried out by GLTC have fed into the design process. Examples of this include detailed assessments of cutterhead tool wear and compressed air interventions required along potential tunnel alignments. The results of these assessments contributed to the selection of the design tunnel alignment. TBM manufacturer Herrenknecht was chosen early in the design phase and brought in as a formal partner by Enbridge. This has enabled a very detailed assessment of TBM diameter/space proofing for saturation diving interventions, thrust jack forces, production rates, probe hole drill fitout, and other aspects. Much of this fed into the design process and contributed to Project Specifications development.

#### **4. Independent Quality Assurance of Construction**

Per Tunnel Agreement Section 5.3, Enbridge will provide the funds necessary for the MSCA to retain an independent quality assurance (IQA) contractor to monitor tunnel construction. Enbridge will require their construction contractor to perform industry standard quality control (QC) procedures and will provide comprehensive quality assurance (QA) for tunnel construction. They are designing, constructing and financing the tunnel and pipeline, and therefore assume primary responsibility for QC, QA and associated risk in ensuring contractor compliance with the requirements of the Tunnel Agreement, Project Specifications, government approvals and applicable law.

Throughout the last quarter of 2020, the MSCA Joint Specifications team worked with Enbridge to ensure clearly defined QC requirements were established in each of the nine jointly developed Project Specification sections. The construction contractor will be required to perform and meet these requirements. Enbridge's QA plan will provide assurance that the Project Specifications are met. Enbridge has provided to us information about their QA policies and preliminary QA plans for the GLTP.

A draft RFP for the MSCA's IQA consultant (contractor) is under development. The IQA scope of work will include providing owner verification documentation, a comprehensive and conclusive record of project QC/QA, testing and inspection, demonstrating that the construction of the tunnel project has met the requirements of the Tunnel Agreement, jointly developed Project Specifications, project specific quality plans (QPs) and Inspection and Test Plans.

***In summary, considerable progress has been made since the March 2020 MSCA board meeting. I recommend acceptance of the nine jointly developed Project Specification sections developed to date. Further, I find that Enbridge's submittals, design process and progress, and quality management planning efforts to be acceptable and in accordance with the Tunnel Agreement.***

Sincerely,

A handwritten signature in dark ink that reads "Michael A. Mooney". The signature is written in a cursive, flowing style.

Michael A. Mooney, PhD, PE

CC: Ryan Mitchell, Manager, Innovative Contracting Unit, MDOT

# Great Lakes Tunnel Project

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## Project Update

# MSCA Deliverables and Key Project Activities Completed to Date

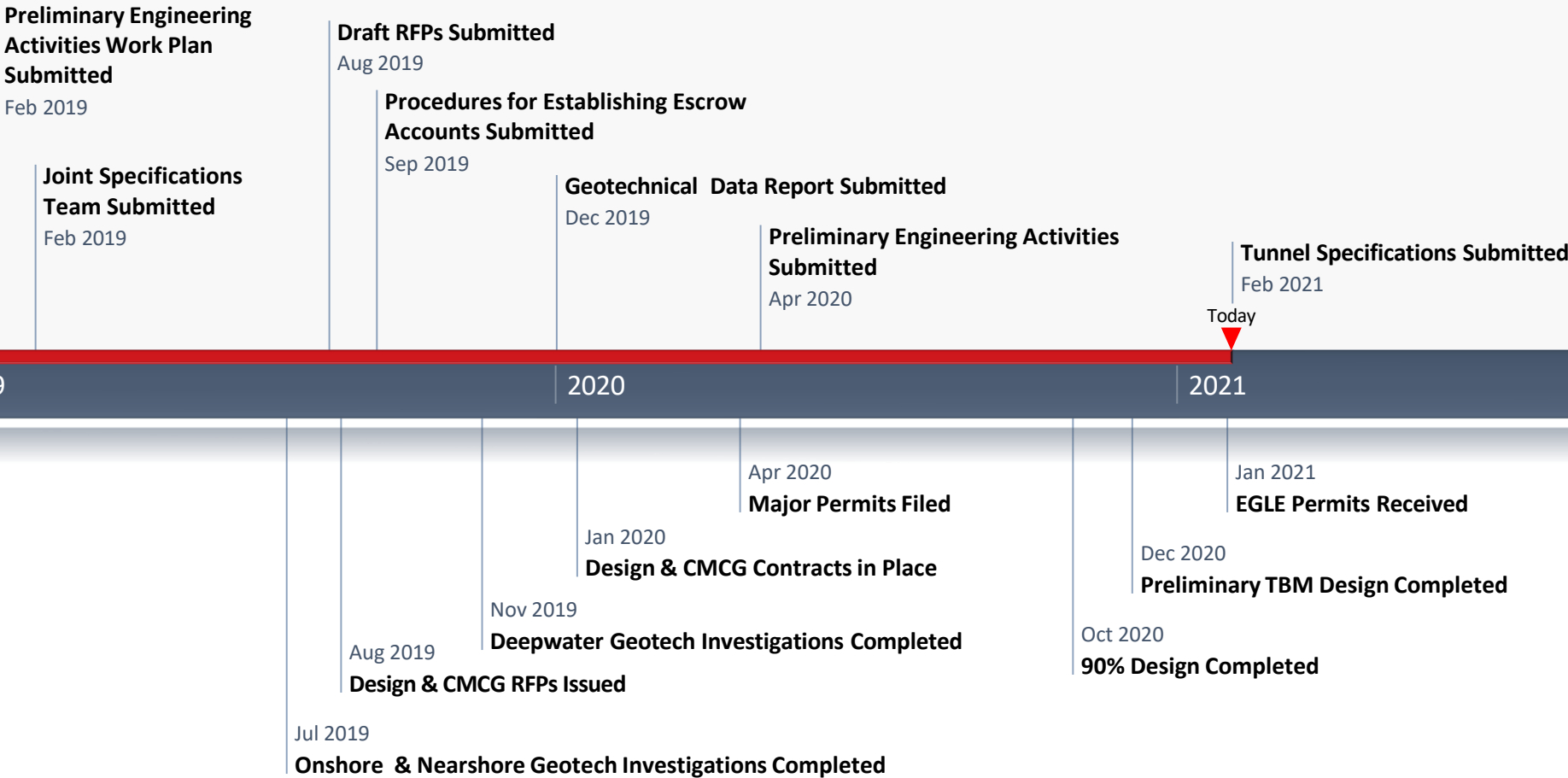


MSCA Deliverables

2019

Key Project Activities

2021



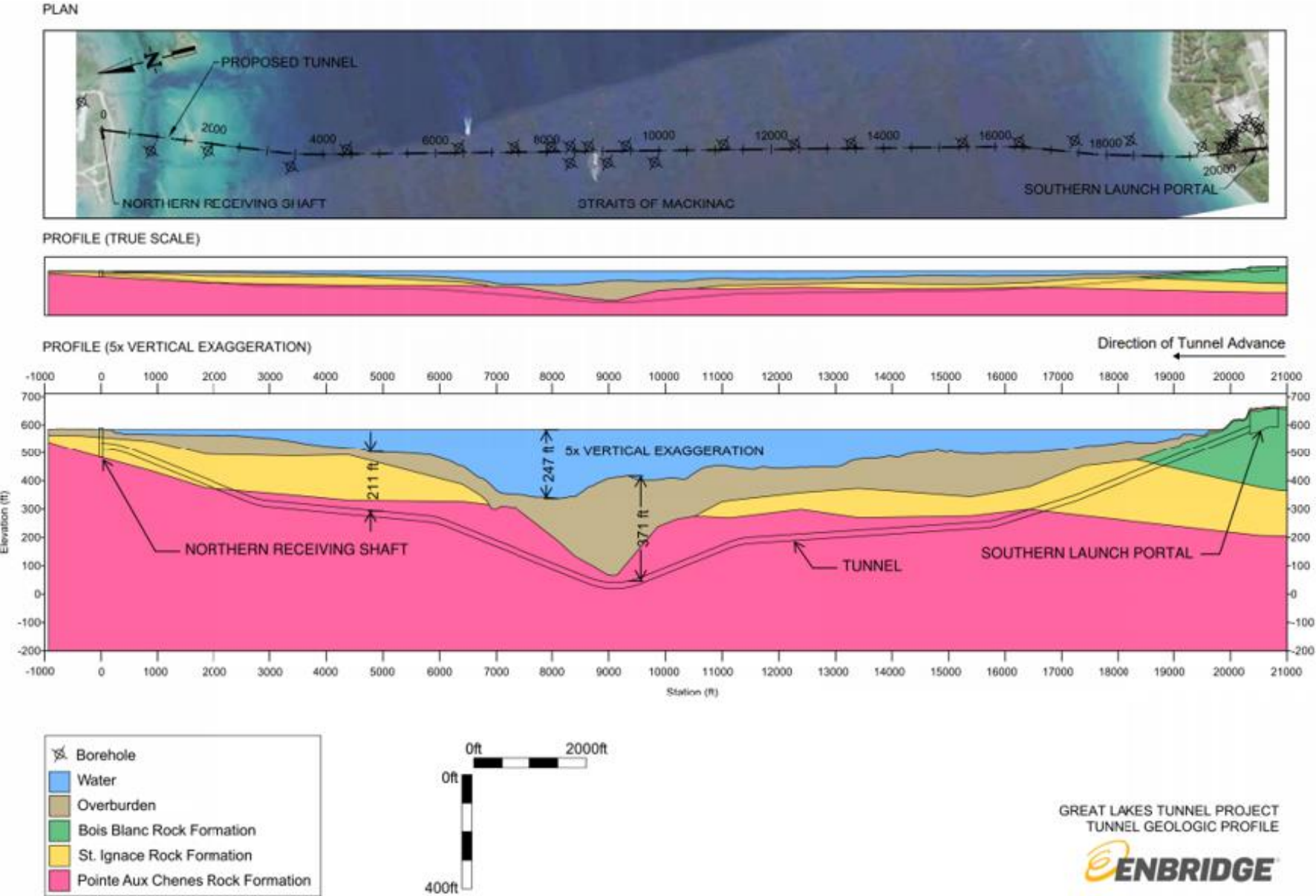


## Great Lakes Tunnel Project

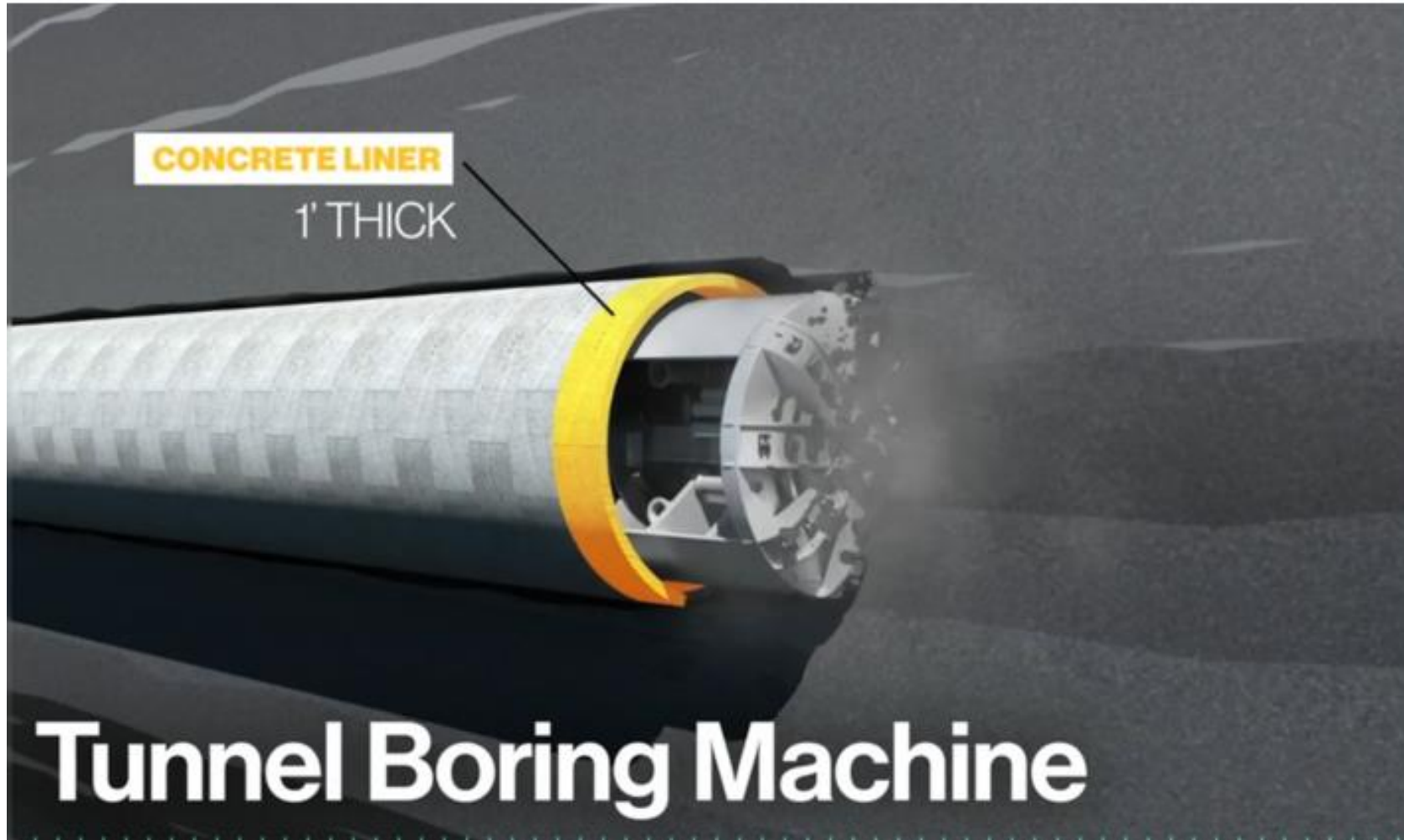




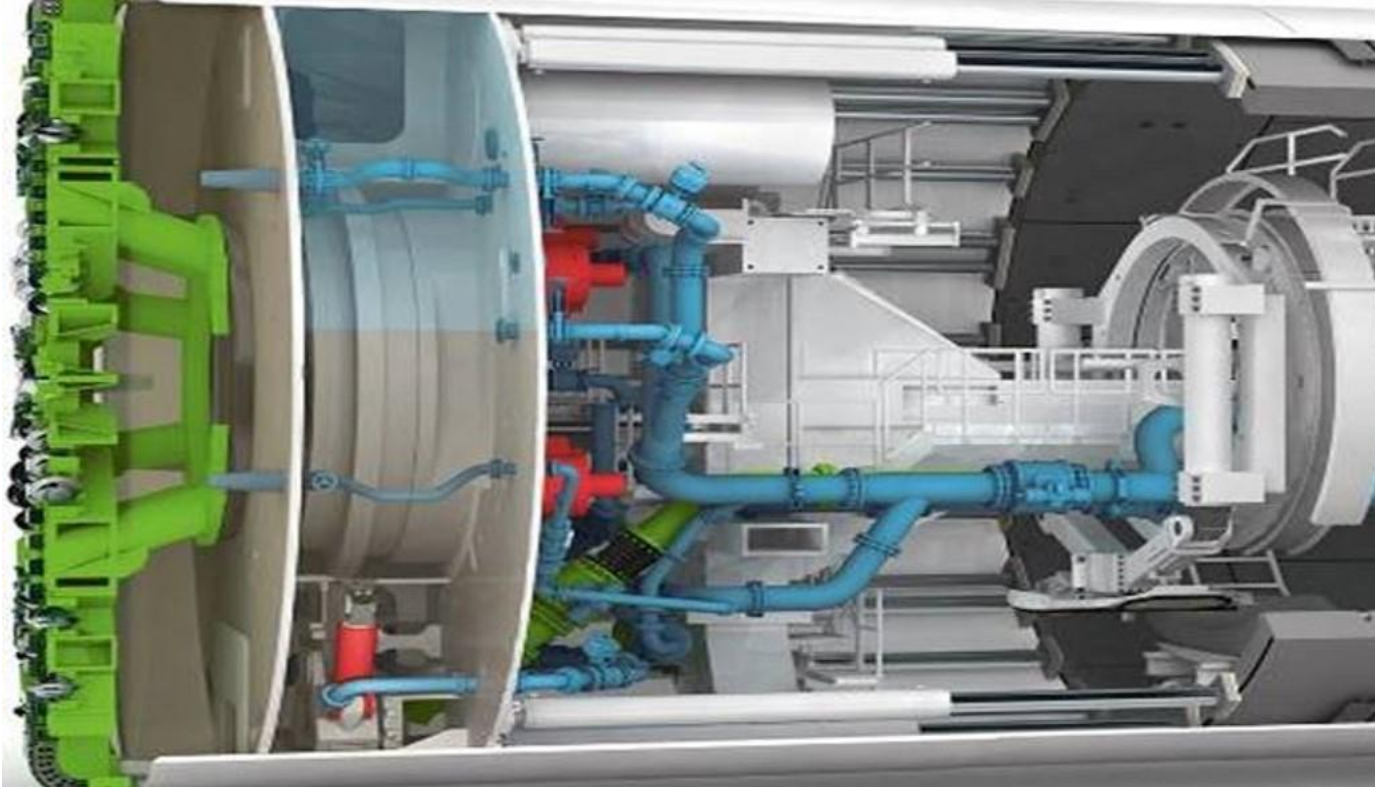
# Great Lakes Tunnel Project Tunnel Geologic Profile



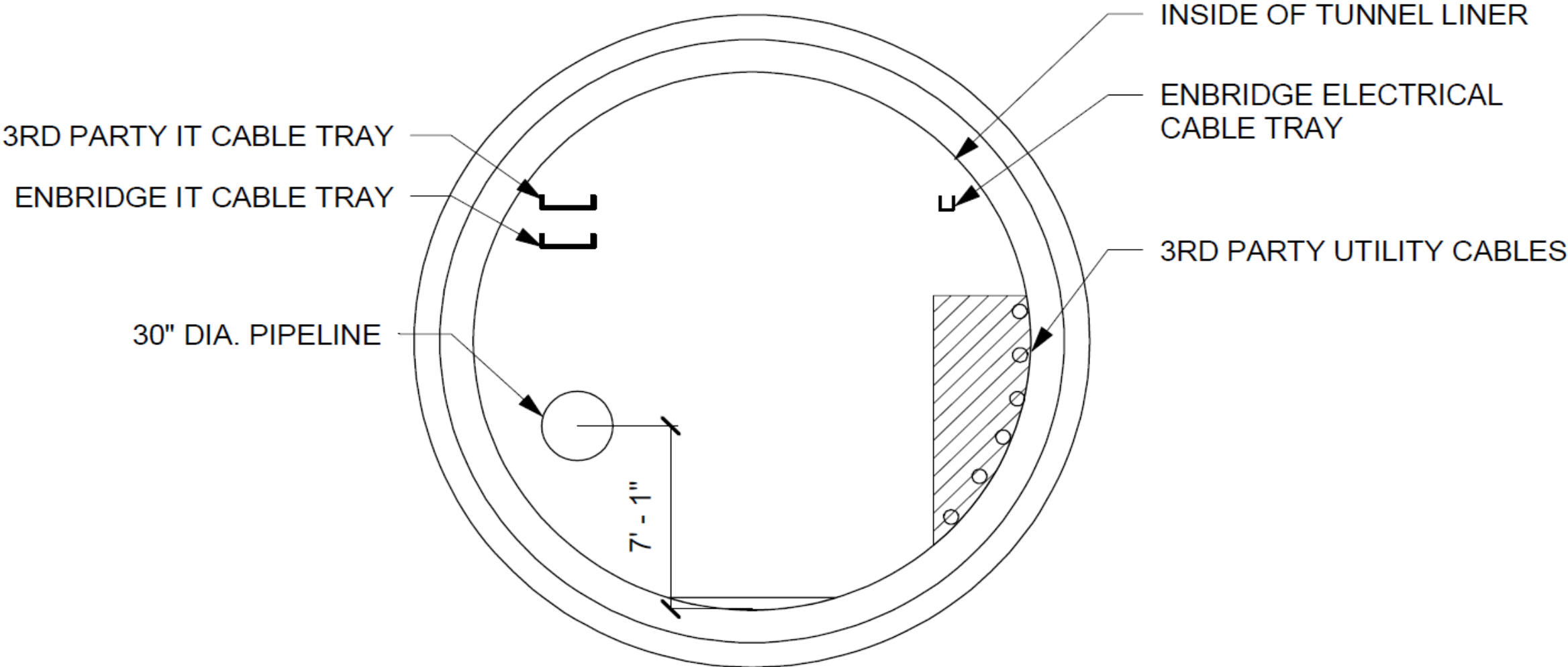
# Tunnel Boring Machine (TBM)



# Tunnel Boring Machine (TBM)



# Space for Third Party Utilities





# Space for Third Party Utilities



Enbridge Straits Maritimes Operations Center (ESMOC)

# Watching the Waters 24/7



 **Play Video**

## Mackinac Straits Corridor Authority

### Public Comment for February 3, 2021 Virtual Public Meeting

Number	Comments Received 1/29/21 - 2/3/21	Name
1	<p>Is there a plan to use hydrovac excavation in the exploratory/planning work for the utility tunnel?</p> <p>What is the full scope of the exploratory/planning work?</p> <p>Who is in leading/overseeing this project? Who will be performing the work?</p> <p>What is the timeline?</p>	Sean Shepherd
2	<p>Good afternoon, my name is Whitney Gravelle, I am a citizen of Bay Mills Indian Community - a Tribal Nation that is a signatory of the 1836 Treaty of Washington, which ceded territory to the United States for the creation of the State of Michigan. In that treaty, Bay Mills reserved the right to fish, hunt, and gather throughout the ceded territory— including in the Great Lakes and the Straits of Mackinac. I'm very disappointed at the MSCA calling a meeting after taking 11 months off to push forward an agenda full of spending and other Line 5 decisions that were made behind the scenes and outside of the public spotlight. The United States Constitution declares that all Treaties made, or which shall be made, under the authority of the United States, shall be the supreme Law of the Land. The MSCA is also subject to the Government Accord the State of Michigan signed with Tribal Nations requiring tribal consultation. Yet, the MSCA has gathered today to move forward the Line 5 projects, which are a direct threat to treaty rights, treaty resources, and Tribal Nation livelihoods - without tribal consultation or tribal input. This meeting and the decisions made here today are not only a violation of the public trust, but a violation of the solemn obligation the State of Michigan has to protect and uphold tribal treaty rights. It is time to remove the dual pipelines and stop the tunnel project. Thank you for your time today.</p>	Whitney Gravelle
3	<p>ALL water is sacred to ALL living thing. Line 5 consideration of a buried pipeline is not the answer to the current situation as it is even more dangerous to ALL life. The Kalamazoo River is still full of oil and was covered up by attempting to hide it with planting clumps of grass. This did not work....one only needs to walk into the muck and oil is stirred up. Numerous humans and animals downstream of the spill develop major health issues. Housing was suspiciously then bought up. Crossing the straits of Mackinac makes absolute no logical sense as it will destroy ALL of the 5 Great Lakes as they are all connected....as ALL life is. The devastation to human life is comparable to a genocide as Enbridge knowingly is aware of all of the damage it will do to humans without these bodies of water. The ability to monitor will be limited and the corrosion rate greater under soil in the water. This Line is imperative to completely close and holds no viable solutions to restart it in any location of bodies of water.</p>	Beth Earl

4	<p>Hello, my name is Robert Gravelle, I am a citizen of Bay Mills Indian Community. I am also a recreational fisher and tribal fisher, and rely on the waters of the Great Lakes. My people – the Anishinaabe - have a teaching that says the decisions we make today should result in a sustainable world seven generations into the future. It reminds us to understand that the decisions we make are not limited by the immediate concerns of today, but instead have implications long after we are gone. I urge the Mackinac Straits Corridor Authority to adopt this teaching as well, and evaluate all of the risks and harms Line 5 poses to all 645-miles the pipeline runs throughout the State of Michigan. I ask the MSCA to protect the State of Michigan. I ask the MSCA to protect the public. I ask the MSCA to think beyond the profits of today. Given the risks and harms to the fishery, recreational fishing, waters, and tribal treaty rights – the dual pipelines should be decommissioned immediately and the tunnel project stopped altogether.</p>	Robert Gravelle
5	<p>My name is Corrina Gravelle, I am a citizen of Bay Mills Indian Community. I oppose the Line 5 dual pipelines and the great lakes tunnel project. With the revocation of the easement by Governor Whitmer, Line 5 is a stranded asset for Enbridge Energy and a huge liability for the people of Michigan. The Mackinac Straits Corridor Authority should not be moving forward with any decisions related to Line 5 without first requiring Enbridge to complete cultural resource surveys for the upland and bottomland areas within the Straits of Mackinac. The proposed project site by Enbridge rests within the Straits of Mackinac, which are the most strategically located area in the Great Lakes region and have been the center for cultural contact and interaction for thousands of years. These cultural and historic sites, known and unknown, are tied directly to the histories and lifeways of the Tribes within the State of Michigan, and any loss or damage to these sites will fall disproportionately on the indigenous people of the Great Lakes. Since time immemorial, the Great Lakes have been an integral part to Bay Mills' way of life, and they will continue to be an integral part of culture and traditions for many generations to come. By failing to consider the cultural significance of the Great Lakes to Bay Mills, and the dangers the Line 5 Pipeline poses to treaty-fishing rights, culture, and traditions of the Anishinaabe the State of Michigan risks killing the heart of North America, the heart of Turtle Island.</p>	Corrina Gravelle
6	<p>I would ask that great consideration and respect be given to the thought of our Great Lakes and Tribal fisherman that count on this for their communities and the families they employ as a way of life, Tribal and Non Tribal count on fishing for subsistence to feed their families and community and have for many many years. As research has demonstrated with past hazard accidental spills nothing is 100 percent safe when it comes to products such as pipe line material, once this happens it cannot be undone no matter how big or small a leak or spill may be. This would devastate our generations of treaty rights and compromise future fishing for food, economy and threaten our way that we have respected and continue to practice today. Chi Miigwetch.</p>	Lana Causley - Smith



7	My name is Evelyene McPherson, I am a citizen of Bay Mills Indian Community. The Line 5 dual pipelines and Line 5 tunnel project pose an imminent danger to the Great Lakes. The Mackinac Straits Corridor Authority is not authorized to make decisions in today's meeting without first engaging in meaningful tribal consultation with the 12 federally recognized Tribes in the State of Michigan. The MSCA is part of the Michigan Department of Transportation and thus subject to the 2002 Government-to-Government Accord, which requires tribal consultation on significant matters. The Accord requires when any agency is making a decision that has tribal implications the agency will take into consideration respect for tribal self-government, sovereignty, and treaty rights. The Accord also requires consultation to take place before any agency takes final action. The MSCA's decision to ignore this directive, convene this meeting, and move on the Line 5 tunnel project is in direct violation of this Accord, is in direct violation of tribal treaty rights, and is in direct violation of the public trust. Line 5 needs to be decommissioned immediately, not re-created one segment at a time.	Evelyene McPherson
8	Enbridge Line 5 should be shut down and no utility tunnel built. Enbridge is a Canadian company using the Straits and the state of Michigan as a shortcut to get oil to Sarnia, Ontario. After what happened with Talmage Creek/Kalamazoo River Enbridge is risking the Great Lakes Basin with Line 5. They want to pump oil to Sarnia let them build a pipeline on Canadian soil not across or under American water sources because it's convenient. Let them pollute their own country and not ours.	Jeanine Jeffrey
9	My name is Janet Farrish-Gravelle, I am a proud citizen of the State of Michigan. I oppose the Line 5 dual pipelines and the Line 5 tunnel project. The pandemic we have all suffered from this last year has demonstrated the renewed appreciation we need for the environment and great outdoors. Enbridge Energy is a direct threat to all we hold dear as Michiganders – our Great Lakes, our pristine beaches, our natural wildlife, our diverse ecosystems and wetlands, our tourism, and our recreational boating. The proposed tunnel site is considered one of the most pristine Great Lakes coastal wetlands in Lakes Michigan and Huron. It is this authority's job to make decisions that benefit the people of this State. Yet, the tunnel project is not in the long term benefit of the people. Continued capital investment in fossil fuel infrastructure is fundamentally at odds with addressing the existential threat of climate change. The construction of Enbridge's proposed tunnel and pipeline project for the next 99 years is contrary to Governor Whitmer's Executive Order on Building a Carbon Neutral Economy, and contrary to President Biden's Executive Order Tackling The Climate Crisis At Home And Abroad. It is time to stop the tunnel project. Thank you for your time today.	Janet Farrish-Gravelle
10	At a time when we need investment in so many things, a tunnel under the straits is not it. I don't want to see Canada's oil being shipped through our most precious resource: our water. Please cancel this project. The people of Michigan deserve better.	Karen Joseph
11	ALL pipelines leak. A leak in the Straits will affect the waterway out to the Atlantic Ocean.	Gerald Fisher

12	<p>This project will become a stranded asset. It is not worth risking the safety of our Great Lakes for a project that will be outdated from the day it's installed.</p> <p>According to the Intergovernmental Panel on Climate Change's highly conservative estimate, in order to limit global warming to 1.5 degrees carbon emissions must fall 45% by 2030. Less conservative estimates place the necessary reductions at 100% less carbon emissions by 2030.</p> <p>Michigan itself is committed to net zero carbon emissions by 2050. It defies reason and common sense to be investing in new infrastructure that must be immediately removed. Do not pour gasoline on the fire when we are supposed to be putting it out.</p> <p>The tunnel project ought to be rejected outright as nonsensical.</p>	Andrew Nowicki
13	<p>Summary</p> <p>Enbridge's proposed tunnel puts Michigan in danger of poisoning drinking water, impacting endangered and threatened species, ruining the state's economy, and will violate the Constitutional Treaty Rights granted to the federally recognized tribes.</p> <p>It is also negligent for any state or federal agency to move forward with the tunnel permit given that the permit does not describe the tunnel plans that have been submitted.</p> <p>Moreover, there have been insufficient studies done to survey the underlying geology, survey for historic and cultural sites, identify appropriate all species likely to be impact by the construction, honor Treaty Rights, survey the integrity of bottomlands Line-5 to withstand construction, accidents, or triggered disasters.</p> <p>The Army Corp of Engineers should also consider, that should a disaster occur during construction or post construction, the federal agency may not be immune for legal retributions. U.S. District Court Judge Judith Levy recently denied EPA's motion to dismiss in the matter of the Flint Water Crisis.</p> <p>Further, the Natural Resources Defense Council (NRDC) sued the EPA for NPDES failure to address toxins in effluent. This question is more than whether there was compliance with the 1977 Clean Water Act, which incorporated the consent decree; it is to note that agencies are held accountable after the fact. There are chemicals used today for which the EPA can be sued for tomorrow.</p> <p>The permit to construct a subterranean tunnel through the Straits of Mackinac must be denied by the Army Corp of Engineers.</p> <p>Permit does not match the actual project</p> <p>EGLE seems to be purposefully misleading the Public at the Hearings, by reading the original permit, which gives the impression that the description therein matches tunnel design being submitted and the known subterranean characteristics.</p> <p>Specifically, the insistence that the tunnel will be through bedrock ignores the sand, silt, karst that were revealed.</p>	Lisa Patrell

	<p>Specifically, the groated design has been abandoned for an ungroated design. Grouting is filling the void between layers with cement to contain spills and prevent methane infiltration.</p> <p>There could be additional divergent facts between the permit and the submitting design and process.</p> <p>It is derilect to approve a permit that is not factual, not accurate, not complete. Abdication of procuring unbiased, complete, and accurate Geology &amp; Seismic Studies and Bottomlands Survey</p> <p>EGLE has decided to use whatever Enbridge submits to satisfy an understanding of the subterranean geology and the surface bottomlands of the Straits of Mackinac. Enbridge is an entity with a vested interest in a having a favorable conclusion to geology and seismic studies and bottomlands survey. This is a clear conflict of interest. It's like a criminal seating their judge for court proceeding. ACE is in turn relying on EGLE. ACE must weigh-in directly to satisfy due diligence I have previously submitted a comment to MPSC about the North American Intercontinental Rift which bisects the Straits and karst formations that are common in the region of the Straits. Other experts have commented that absence of a current seismic study is not usual protocol and the geology study done was not up to industry standards.</p> <p>Newly discovered, but long hypothesized, prehistoric indigenous lithic constructions, is yet another alarm that EGLE has not met its duty to serve Michigan. The facts uncovered in this breaking news reveals deliberate subversion.</p> <p>North American Intracontinental Rift</p> <p>Here is a link to a technical article with new magnetic images of the incomplete separation of 2 tectonic plates that have been known for decades. There is a correlation already documented between fracking injection wells in the area of the rift and the occurrence of earthquakes. A seismic study to evaluate tunneling across and/or through the rift should be done.</p> <p><a href="https://www.sciencedirect.com/science/article/abs/pii/S0040195118302646">https://www.sciencedirect.com/science/article/abs/pii/S0040195118302646</a></p> <p>Karst Formations</p> <p>Karst is a</p>	
14	<p>These are times when official policy doesn't always reflect the best and scientifically sound analysis.</p> <p>You must remember this:</p> <p>The millions of people depending on clean water in the Great Lakes.</p> <p>The irreparable damage to the entire ecosystem for all countries affected caused a spill from this tunnel.</p> <p>We understand better today than those years ago, some of the unintended consequences in case of failure.</p> <p>Stop this risky thinking.</p> <p>There are better ways to accomplish the end goal.</p>	Mr. Jan C. Porter

15	This tunnel is a bad idea. We finally should understand the advance in knowledge since this pipeline was considered a good idea.	JP Porter
16	Can you imagine seeing oil in our precious Mackinac Island waters? Can you imagine how devastating that would be to our tourism economy? As a Michigan family that holds our beautiful Great Lakes so dear, we are begging you to put Michigan first, not a greedy corporation. The risk of oil in our water is too severe. Be the hero!	Nicole Dykstra
17	<p>Dear Sir or Ms:</p> <p>In light of the recent discovery of potential archeological sites near/under the Mackinac Bridge and the photos of the corrosion and damage of Line 5, I am begging you to shut down Line 5. Enbridge has a history of oil spills, over 1,000,000 gallons were spilled in Kalamazoo just a few years ago!</p> <p>Only a very small percentage of those products traversing that pipeline stay in Michigan; these are Canadian products and they are going back to Canada near Port Huron.</p> <p>The water currents that run through the Mackinac Straits are very strong, that is one of the reasons some ships drag their anchors: to keep their ship going in the correct direction. But it isn't only the ships. There is the fact that this pipeline was laid 68 years ago, was not intended to stay below the Mackinac Straits forever and it has both damage and corrosion.</p> <p>Both the Upper- and Lower- Peninsulas have a tourist-driven economy, fishing, swimming, outdoor activities along the beautiful shores of Lake Huron and Lake Michigan, past Beaver Island and Mackinac Island, down to Traverse City and Petosky, Alpena... Imagine what those beaches could look like covered with oil, similar to the beaches in Louisiana several years ago. Tourism would drop, businesses would close and thousands of families would be without income... for many, many years.</p> <p>The proposed tunnel may take up to 10 years to complete. That would mean that the State of Michigan would be betting that Line 5 will not be compromised for those years.</p> <p>Please consider your vote. We, the voters, elected you to protect the residents of Michigan, to care for our health and safety, our prosperity. Vote to shut down Line 5. Enbridge should build on their side of the border.</p> <p>Thank you,</p> <p>Nancy Johnson Registered voter</p>	Nancy Johnson

18	<p>The Great Lakes are one of the USAs most critical environmental resources. They contain a fragile ecosystem that provides essential resources for the countries around them. To put these fresh waters at risk is hardly worth the potential damage that could be caused by an oil spill or tearing up the bedrock (and historical artifacts) to build a pipeline. This clearly does not benefit Michigan. Current advertising threatens that we will run short of resources for heat and energy without the pipeline. I take umbrage with our public being manipulated by misleading threats. The information I have received indicates that very little of the oil in the pipeline is actually used in Michigan. Who actually profits from the pipeline? Does a wealthy business have more weight in this matter than the people who depend on the Lakes for their livelihoods?</p> <p>Let's attack the real issue and work on alternatives. to supplying/producing energy. Please don't risk the destruction of one of the greatest resources we have. Stop the pipeline! Stop the destruction of our Great Lakes!</p>	Pauline Reeder
19	<p>Why permit an energy source we are pledging to move away from? MI does not need the products carried in Line 5. The tiny part that we get can be supplied in other ways. Besides the damage this foreign company with a bad track record can cause to our fresh water &amp; tourism there are archaeological concerns. MI needs to invest in &amp; promote renewable energy.</p>	Cathy Sayre
20	<p>Along with the facts that Michiganders use very little from what Line 5 transports through Michigan and that what relatively little is used can be replaced at low cost, please consider that Line 5 runs directly through an area of potentially great historic and current cultural interest which is likely to be severely harmed, if not destroyed completely by the building of a utility tunnel.</p> <p>Also consider Enbridge's poor track record of transparency and lack of general accountability. In addition to the many recorded examples of current easement violations, there is the fact that Enbridge is responsible for the two largest inland oil spills in the U.S. - before the spill in Kalamazoo, there was an even larger spill in Minnesota.</p> <p>I was part of the group who stumbled on the potential cultural/archeological site that extends at least 3,343 feet to the west of Line 5 and 1,572 feet to the east of Line 5 per our initial findings in the fall of 2020. Our group has submitted comments to EGLE, ACoE, and MPSC regarding this. Unfortunately, a way to attach those comments here is not possible, but I hope that you will look those up or email me so you can take our detailed comments into consideration as you make this very important decision.</p>	Terri Wilkerson

21	<p>Good afternoon, my name is Kathryn Tierney, as in-house counsel, I offer these comments on behalf of the sovereign nation Bay Mills Indian Community. Bay Mills Indian Community is a signatory of the 1836 Treaty of Washington. In that treaty, Bay Mills reserved the right to fish, hunt, and gather throughout the ceded territory— including in the Great Lakes and the Straits of Mackinac. As a sovereign government with responsibility for managing and protecting the Great Lakes, Bay Mills Indian Community opposes placement of Line 5 in a tunnel beneath the Straits of Mackinac. Line 5 has been an ongoing threat to Bay Mills’ treaty rights, which are the supreme law of the land, since it was built in 1953. Governor Whitmer’s decision to revoke the easement for Line 5 has significantly changed circumstances and requires the Mackinac Straits Corridor Authority to suspend making decisions concerning the Line 5 Tunnel Project. The Mackinac Straits Corridor Authority’s decision to convene today without public involvement or tribal consultation is deeply concerning to Bay Mills. The information and decisions made at this meeting today demands public review and involvement, as there is not an agency at the State or Federal level that will verify or certify the feasibility of the tunnel project. The burden has instead been placed on the public, and the public should be given adequate time and opportunity to respond and ensure submissions by Enbridge of their accuracy and reliability. Given the risks and harms to the waters, cultural resources, and tribal treaty rights – Line 5 is a pipeline that should be decommissioned as quickly as possible and a tunnel project that should be stopped altogether. Miigwetch – thank you.</p>	Kathryn Tierney
22	<p>My first family outing with my husband involved getting into a small boat to lift smelt nets with my father-in-law out of Lake Superior. The lift was bountiful and water met the brim of the boat. “Don’t move!” my father in law yelled as the fish in the nets flopped all around me. In that moment, I felt the respect and the love needed to be a fisherman’s wife. Marrying into a fishing family meant I was marrying into the lifestyle. I learned of the extreme hard work, dedication, and passion one has to have to find the herring in the winter, the smelt in the spring, and the whitefish and salmon in the summer. The catch doesn’t just fill our families’ bellies, but it ensures we are able to sustain our livelihoods and keep a roof over our heads. To be a fisherman and to be a part of a fishing family requires love, commitment, and respect. Respect for the work, respect for the fish, and mostly important, respect for the water. To grant permission for Line 5 to openly endanger our waters is a complete disrespect to the water and to the people of Michigan. You are threatening our way of life and risking the life of the water. You are threatening our identity as Michigan residents, who know the beauty and the importance of our lakes. This isn’t just about fisherman; this is about everyone who relies on the Great Lakes to support their livelihoods across the state economy. And for what? The oil that pumps through Line 5 barely enters our state. So, by granting permissions, you are risking it all, for beyond nothing and exploiting future generations of Michigan residents.</p>	Candice LeBlanc

23	<p>Dear Members,</p> <p>For many years individual citizens, stakeholders, environmental groups, sovereign tribal nations and scientists from around the great lakes have been watching and working tirelessly to hold back the attack Enbridge has waged on our Straits. It is time for this body to take a definitive role and step up to its responsibility of stewardship for the precious waters in the Straits of Mackinac.</p> <p>The initial easement has been addressed by our Governor when just this past November. The Office of the State Attorney General on behalf of us all, filed an action requiring Enbridge, " ...to cease operation of the dual pipelines in the Straits." (Nov. 13,2020) Enbridge has declared that they will not be complying with this order.</p> <p>Now they come forward with a plan to build a tunnel. Several points to consider.</p> <ul style="list-style-type: none"> <li>• The permit submitted to the Army Corp of Engineers does NOT match the most recent designs submitted. The original design has been abandoned for a design in which simple grouting filling in voids between layers with cement to contain spills and prevent methane from escaping. Imagine methane bubbling up from beneath this commission's very 'feet'.</li> <li>• There have been insufficient studies done regarding the geology of the area, specifically in the underlying geologic integrity. Enbridge's own drilling ship&lt; Highland Eagle" left a rod sticking out of the bedrock late in the summer of 2019 as they were doing their survey. A survey, by the way, that did not meet industry standards of core boring 25-50 feet grids whereas Enbridge only drilled holes 950 feet apart in order to save time and money. They also did not disclose this information until their "survey" was done, and their ship was back in the North Sea where it belonged. Seismic studies and other geologic surveys have identified Karst Formations and an incomplete separation of tectonic plates.</li> <li>• Significant Archaeological discovery was made just this past year that made news around the world. Due diligence requires and common sense dictates, that these discoveries need further study by trained and learned scholars and with the blessings and inclusion of the tribal entities whose ancestors walked, lived, and died in those prehistoric lands.</li> <li>• And finally, there's the matter of what they will be pumping and dumping into the Straits. They are claiming there will be no net loss/gain between what they will be using and what they will be putting into the water, groundwater that is used for drinking water locally. As mentioned earlier, methane will be released as it is a naturally occurring chemical- a highly flammable one at that. How will that be addressed?</li> </ul> <p>This tunnel is unnecessary. It is unsafe. It is negligent and contrary to the mission and purpose of this body to bend to the will of a company with no regard for the water, eco-systems, cultures and communities that depend on the Lakes.</p> <p>FOR THE HEALTH AND SAFETY OF ALL LIFE HELD WITHIN, DO NOT GRANT THIS PERMIT.</p>	Shannon Donley
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24	<p>GM just announced their goal for the end date of production of gasoline-engine vehicles. Oil is being phased out. The clock is already ticking toward the end of the need for this tunnel.</p> <p>As the resident of a Lake Michigan and river- bordering resort town, and an environmental proponent, I was riveted to the failures of state appointed boards, managers and policies to protect our water in recent years. Flint, Nestle, and Kalamazoo River are examples of failures to respect and protect citizens. Who voiced needs for and desires for protections of our life-sustaining water . For an example of the environmental risks and financial costs of failures in the transportation of oil in proximity to Pure Michigan water, we have only to look back at the Kalamazoo River leak. At the time, local and national media was fixed on concerns about the extensive damage in the event of the oil reaching Lake Michigan. A similar failure at the location of this project could be catastrophic to two Great Lakes. There would be no buffer time to save the lakes from exposure. Let's not have another Flint or Kalamazoo fiasco adding to our infamous list of failures.</p>	Mary Warbasse
25	<p>Please be very careful with whatever authority you think you have. Take your time. Make sure you don't start down a path that any of us may regret in a month, a year, a decade, in 7 generations.</p> <p>My advice to you is to be careful to avoid presenting yourself as an expert. Defer to the experts, all of them; ones that think the tunnel is a good idea and ones who think it is a bad idea. Ask over and over...how will the construction and operation of any tunnel impact the local environment?, is the risk management plan for both construction and operation complete?, if there is a failure because of funding, geology, or hydrology, what will be the back up plan?</p> <p>Why act without a complete review by the Army Corp of Engineers or any other parties with jurisdiction?</p> <p>I do not support the tunnel. I think our investments are better made in a green renewable economy. I think Enbridge has proven to be an unreliable business partner. I think any tunnel would be a violation of our treaties with Indigenous people. I think the potential jobs are overstated. I think there are cost effective options for propane in the Upper Peninsula. I think the pipeline is about plastic production in Canada and Pennsylvania, not about energy needs in Michigan. I think the construction plan is based on old and insufficient data about the geology and hydrology of the Straits. I think most Michiganders are more concerned about protecting the Great Lakes than about Enbridge's promises of jobs and energy.</p>	Charles Carpenter



26	<p>this is a dangerous thing they are doing.</p> <p>please stop this tunnel. it is unnecessary for the use of this which could cause great harm to our water ways, fish, and wildlife for future years. if the pipeline breaks while the tunnel is built, who's responsible, the state of Michigan or the corporation? who's going to pay for the clean up? are they going to repopulate the fish and marine life? how much fresh water will be loss to the water municipal plants in the target areas of the spread of a breakage on the pipeline?</p>	Jim Carey
27	<p>I do not use propane so am not personally impacted. However, a recent newspaper article led me to suspect that the State of Michigan executives, while trying to revoke the Line 5 easement, may be trying to then shuttle the consequences of their actions if successful, i.e., propane shortages and/or cost increases, off onto the private suppliers and sectors. That would be a dereliction of duty. The state executives, particularly Gov. Whitmer and AG Nessel, have by their actions, taken on an ABSOLUTE 100% personal responsibility to ensure an uninterrupted propane supply continuing, and without any price increases. Any consequences of state action are not created by the propane suppliers, so they bear no duty to resolve them. Further, the State must find solutions without any tax increase or services cuts for the rest of us. This is called simple accountability. This is what we taxpayers fund their salaries for, and if they cannot or do not complete their jobs by solving problems they create, they have not earned their paychecks and must resign immediately. Fair is fair.</p>	Tom North
28	<p>The tunnel project is bad policy on so many levels. This plan ignores Native sovereign Nations input when they have objected according to traditional knowledge. A newly discovered archaeological site is now in danger of being disturbed or destroyed. We are wasting time, energy and money on a dying fossil fuel industry when we should be retreating from it during the global climate crisis. #NoTunnelNoPipeline</p>	Julie Dye
29	<p>I am one of the tribal citizens that discovered the 10 thousand year old Sacred Cultural site at the bottom of the Straits of Mackinac. Being part of this amazing discovery, taught me one very important lesson. That the cultural studies that should have been done over the decades have not been done. That Enbridge nor the Army Corp of Engineers took the time to follow the law. Now it is clear, we need to have the cultural studies completed by the State of Michigan. We need to take control of our own state and not be bullied by a corporation that does not have our best interest. This cultural sacred site could hold so many answers about the ancestors that lived here before us. This needs to be celebrated and appreciated, not destroyed by building a tunnel.</p> <p>The Little Traverse Bay Bands of Odawa Indians recently passed a resolution for the protection of the Traditional Cultural Property at the Straits of Mackinac. We have not given up our treaty rights, our land, our bottom lands, our traditions nor our culture and we will not allow Enbridge to build a tunnel on the bottomlands of the Great Lakes. If you allow enbridge to ignore the Cultural Sacred Site that was found and not protect it, that history will be lost. Forever.</p> <p>Little Traverse Bay Bands of Odawa Indians 7500 Odawa Circle</p>	Andrea Pierce

	<p>Harbor Springs, MI 49740</p> <p>TRIBAL RESOLUTION# 011421--Q.I_ To Protect the Straits of Mackinac as a "Traditional Cultural Property Site"</p> <p>WHEREAS the Waganakising Odawak Nation, known as the Little Traverse Bay Bands of Odawa Indians, and its citizens are vested with inherent sovereignty and right to self-governance;</p> <p>WHEREAS the Little Traverse Bay Bands of Odawa Indians (LTBB) is a federally recognized Indian Tribe under Public Law 103-324, and is a party to numerous Treaties with the United States the most recent of which being the Treaty of Washington of March 28, 1836 (7 Stat. 491) and the Treaty of Detroit of 1855 (11 Stat. 621);</p> <p>WHEREAS Waganakising Odawak Statute 2019-006 Tribal Historic Preservation Office (THPO) was signed into law on June 12, 2019;</p> <p>WHEREAS The Little Traverse Bay Bands of Odawa Indians Tribal Council, as the authorized Advisory Council to the Tribal Historic Preservation Program (THPP), is in support of the Tribal Historic Preservation Office (THPO) compiling preliminary research that will be used to protect the cultural and historical resources of LTBB;</p> <p>WHEREAS a "Traditional Cultural Property Site" is a property that is eligible for inclusion in the National Register of Historic Places (NRHP) based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community;</p> <p>WHEREAS the Enbridge Line 5 pipeline and proposed tunnel lies within the terrestrial and submerged bottomland areas of its route in the vicinity of the Straits of Mackinac;</p> <p>WHEREAS the Straits of Mackinac, both the terrestrial and submerged bottomland, has significant history, culture, and identity with the LTBB;</p> <p>WHEREAS with the support of Tribal Council, the THPO has designated the area surrounding the Enbridge Line 5 pipeline project as a "Traditional Cultural Property Site" that has significant history, culture, and identity with the LTBB;</p> <p>THEREFORE, BE IT RESOLVED that the Little Traverse Bay Bands of Odawa Indians Tribal Council, as the authorized Tribal Historic Preservation Program Advisory Council, is in support of the Tribal Historic Preservation Office compiling preliminary research for the area surrounding the Enbridge Line 5 pipeline project in order to protect the traditional, cultural and historical resources of Little Traverse Bay Bands of Odawa Indians and to submit the information to</p>	
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	the United States Army Corp of Engineers, and other agencies for formal designation as a "Traditional Cultural Property site".	
30	It makes no sense to support new fossil fuels infrastructure in the year 2021.	Michael Motta
31	The Chippewa Ottawa Resource Authority or CORA remains opposed to the continued operation of Enbridge Line 5 and the construction of a tunnel beneath the Straits of Mackinac. CORA is composed of the Bay Mills Indian Community, the Grand Traverse Bands of Ottawa and Chippewa Indians, the Little River Band of Ottawa Indians, the Little Traverse Bay Band of Odawa Indians and the Sault Ste. Marie Tribe of Chippewa Indians. Continued operation of Enbridge Line 5 threatens hundreds of tributaries, inland lakes, Lake Michigan, Lake Huron and Lake Superior that tribal members depend on for traditional subsistence and commercial fishing protected under treaties with the United States.	Mike Ripley CORA Envrionmental Coordinator
32	The State of Michigan sells its recreation/tourism industry as "Pure Michigan". The two picturesque peninsulas are surrounded by the bountiful Great Lakes- the largest fresh water system in the world. As Michiganders, it is our responsibility to ensure this resource remains unharmed, not just for the sake of Michiagn's economy, but for the sake of our livelihoods, and the livelihoods of future generations. Enbridge is putting this great resource at risk with the Line 5 pipeline, and the proposed tunnel project. It is reckless, irresponsible, and reprehensible to allow a corporation who is only interested in short-term economic gains, to endanger the greatest fresh water resource in the world. Not only should the tunnel project be stopped, the Line 5 pipeline must be shut down. I implore each and every member of the Mackinac Straits Corridor Authority to envision what the Mackinac Straits would look like should there ever be an oil spill. Scuba divers in St. Ignace will no longer be able to dive in search of shipwrecks. Visitors of Mackinac island will no longer want to visit its polluted shores. Helicopter, kayaking, and parasailing tours will suffer. Beaches will be closed. Wildlife will perish. The Straits will no longer be picturesque, but grotesque. This is the fate that awaits us, our children, our grandchildren, and our great-grandchildren. Don't allow the short-term economic gain of a single corporation to take precedence over the long-term health and vitality of our state and our people. Fight to protect the Michigan we all know and love-"Pure Michigan".	Brianna

33	I completely reject Line 5 pipelines and the tunnel project going under the Straits of Mackinaw. I have lived in Michigan my entire life. My tribal nation, Little Traverse Bay Bands of Odawa Indians, and ancestors are from Michigan. As a family my parents instilled us that it is our responsibility to practice water conservation and to protect our natural resources. As a child I remember learning about invasive species that impact our fisheries, the negative impact that poor infrastructure has on our waters, and the decisions I make in my daily life will ultimately impact the health of our Great Lakes in some way shape or form. As I grew, I also began to understand that we as Odawa fought to stay in homelands and one main reason is to stay near the water. The water is what sustains life for all on the planet, it is the home of many spiritual helpers, and is where many of my ancestors who have died were buried along the shores. As an Anishinaabe Odawa woman I am here to say that all the years of being a good citizen and caring for those around me could all be undone if this project goes through. The ramifications of any oil spills, leakages, breakages etc. that occur from this tunnel and pipelines could be murderous. I implore you to continue doing what many of us have done, is to care for our waters the way they care for us. Chi Miigwech for your time and consideration.	Emily Proctor
34	Please stop the Line 5 pipeline through the Straits of Mackinac. A spill would be catastrophic to the Great Lakes and the entire Midwest. We know enough about science and technology to do something better, and the Line 5 tunnel is not focused on a sustainable future. Thank you for considering/prioritizing the dangers and risks inherent in this project and looking for alternate solutions.	Jenni Herrick
35	<b>It should be a no brainer; however, if you have to think twice about this, just go look at history to get an indication of the RISK this imposes to my Great Lakes, ☹ Just Say No! PLEASE!!!</b>	John
36	Thank you for the opportunity to comment today. LTBB does not support Enbridge's Great Lakes Tunnel Project to place a cement tunnel under the Straits of Mackinac. LTBB adopted a Tribal Resolution in October 2018 concluding that the only adequate solution to mitigate the risk posed by the operation of Line 5 is to decommission and safely remove all segments of Line 5. Thus, the tunnel project is not an adequate solution for risk mitigation. Little Traverse Bay Bands has numerous concerns with the proposed Line 5 tunnel under the Straits. Several aspects of this project are still unknown, including the lack of geological knowledge due to the limited number of borings, and insufficient information on the location of cultural resources near the project site, mitigation of the threatened flora species, whether the wastewater effluent discharged into the Straits will be contaminated, and how Enbridge will alleviate the risks involving methane during tunnel construction and maintenance. The Little Traverse Bay Bands of Odawa Indians Tribal Historic Preservation Office offers a finding of "Adverse Effect to known historic, traditional religious, and cultural significance properties that will be affected".	Traven Michaels

	<p>The 1836 Treaty of Washington retained treaty rights for the signatory tribes, including LTBB, in the ceded territory which includes the Straits of Mackinac. Either the repercussions from the tunnel project or the continued use of the dual pipelines pose an insurmountable risk to the signatory Tribes' treaty rights. With a large portion of the 1836 Treaty Tribes' fish harvest coming from spawning areas in the Straits, Line 5 creates an unacceptable risk to the fishery. Despite this immense risk, this is not just a Straits problem. There are many other locations in the Upper Great Lakes Basin through which Line 5 traverses critical areas and risks irreversible damage to aquatic ecosystems. Similarly, in the event of a spill, flora and fauna which live near the contaminated areas will likely not be suitable to harvest, eliminating their use by the Tribes since time immemorial. The tunnel project creates an unacceptable risk to the health of our Tribal community and our legal rights under the 1836 Treaty of Washington.</p> <p>Enbridge's inadequate safety and communication records from 1953 to date do not allow us to trust that Enbridge will follow the environmental mitigation strategies outlined in their applications. In addition, LTBB is continually working towards being more sustainable, in part, by installing multiple solar panel arrays, and increasing energy efficiency. Constructing a tunnel on an easement lasting for 99 years would run contrary to the crucial societal effort to rapidly reduce fossil fuel usage and mitigate the effects of climate change.</p> <p>This project could damage culturally important sites, the Tribal commercial fishery, offshore and inland Tribal treaty rights, drinking water for local citizens, Northern Michigan's tourism industry, and our many more-than-human relatives.</p>	
37	<p>The Sault Ste Marie Tribe of Chippewa Indians has passed Resolution 2021-38, To Protect the Straits of Mackinac as a Traditional Cultural Property Site. The Tribe is signatory to the 1836 Treaty of Washington, which predates the existence of the State of Michigan, and maintains that it has never ceded control of the bottomlands of the straits or its other fishing grounds, either in the Treaty of Washington or in any other treaty of cession.</p> <p>The Tribe holds and exercises usufructuary rights to hunt, fish, and gather and the "rights of normal occupancy" of the lands in the ceded territory and does not consent to have this territory occupied by crude oil pipelines whether lying on the bottom of the straits or contained in a tunnel beneath the waters.</p> <p>The Text of Resolution 2021-38 is as follows:</p> <p>To Protect the Straits of Mackinac as a Traditional Cultural Property Site</p> <p>WHEREAS, the Sault Ste. Marie Tribe of Chippewa Indians (Sault Tribe) is a federally recognized tribe and invested with inherent sovereignty and right to self-governance; and</p> <p>WHEREAS, the Sault Tribe is signatory to the 1836 Treaty of Washington which ceded the use of land that allowed for the formation of the State of Michigan; and</p>	Kathleen Brosemer, Environmental Manager, Sault Tribe

WHEREAS, the 1836 Treaty of Washington reserved usufructuary rights in perpetuity, such rights to include hunting and gathering and the rights of usual occupancy, to the native peoples signatory to the treaty; and

WHEREAS the Tribal Board of the Sault Tribe is in support of the Sault Tribe's Language and Cultural Department and Environmental Department compiling preliminary research that will be used to support the protection of tribal cultural, historical, and natural resources; and

WHEREAS the Enbridge Line 5 twin pipelines and its proposed tunnel lie within the terrestrial and submerged bottomlands of the Straits of Mackinac; and

WHEREAS the Sault Tribe never ceded control of the lakes or lake bottomlands to any other government entity in the Treaty of Washington or any other treaty of cession; and

WHEREAS the Straits of Mackinac, including the waters, the terrestrial ecosystems adjacent to the waters, and the submerged bottomlands, as the heart of Turtle Island in the middle of the Great Lakes, has significant culture, history, and identity to the Sault Tribe; and

WHEREAS the Sault Tribe Board of Directors supports the designation of the Straits of Mackinac and its submerged bottomlands as a "Traditional Cultural Property" site with significant culture, history, and identity,

NOW, THEREFORE, BE IT RESOLVED, that the Sault Ste. Marie Tribe of Chippewa Indians does hereby, as follows:

1) Direct the Sault Tribe Language and Cultural Department and Environmental Department to compile preliminary research for the area around the Enbridge Line 5 twin pipelines and the proposed tunnel project in order to protect the traditional cultural and historic resources of the Sault Ste. Marie Tribe of Chippewa Indians, and further

2) Direct the Sault Tribe Language and Cultural Department and Environmental Department to submit the information to the US Army Corps of Engineers and other agencies for formal designation as a Traditional Cultural Property site.

BE IT FURTHER RESOLVED, that the Chairperson and Treasurer, are authorized to execute any and all documents necessary to carry out the intent of this resolution.

#### C E R T I F I C A T I O N

We, the undersigned, as Chairperson and Secretary of the Sault Ste. Marie Tribe

	of Chippewa Indians, hereby certify that the Board of Directors is composed of 13 members, of whom __13__ members constituting a quorum were present at a meeting thereof duly called, noticed, convened, and held on the _2nd__ day of _February_____ 2021; that the foregoing resolution was duly adopted at said meeting by an affirmative vote of _12__ members for, __0__ members against, _0__ members abstaining, and that said resolution has not been rescinded or amended in any way.	
38	My name is Patricia McGowan, a member of the Little Traverse Bay Band of Odawa Indians. I am a mother and a grandmother and it is my responsibility to take care of my family, my community and the next 7 generations. I can not in good conscious be silent any longer as Line 5 threatens the Great Lakes. The proposed tunnel does not protect our waters and will destroy historical sites on the floor of Lake Michigan. You all should be ashamed of yourselves for not taking into consideration the environmental impacts that this tunnel will cause and the real threat that continued damage to the environment. When the oil spills and our lives are forever changed, this will be the fault of the Enbridge AND the Mackinac Straits Corridor Authority members who vote for the tunnel.	Patricia McGowan
39	<p>1. The tunnel does nothing to address the risk of the 90 miles of pipe that lies within a mile and a half of the Lake Michigan shoreline along the highway 2 corridor. In fact it makes it riskier because it diverts attention to the straits crossing as if that's the only danger in this 68 year old pipeline and would mean the whole line would be kept operating for additional decades past its design life.</p> <p>2. It's not in the public interest to build a tunnel to ship oil for 99 years. We must stop burning oil within the next 20 years if humanity is to survive the sixth extinction. And much sooner than that to avoid horrific suffering from droughts, fires, storms, and crop failures. To plan for a half billion infrastructure project to keep shipping oil is inhumane, unjust, shortsighted, and cruel.</p> <p>3. We believe enbridge has no intention of actually building this tunnel. A half billion "investment" in four miles of an aging pipe more than 700 miles long doesn't make sense. A half billion investment in a system with excess capacity doesn't make sense. A half billion investment in a sunset industry doesn't make sense.</p> <p>The only thing that makes sense is a pretense of tunnel plans to mollify those worried about an anchor strike in the straits - so they can keep operating as long as it's still profitable.</p>	Kathleen Brosemer, Environmental Manager, Sault Tribe



40	<p>My name is Ryan Gravelle, I am a citizen of Bay Mills Indian Community. I oppose the Line 5 dual pipelines and the Line 5 tunnel project. I am extremely concerned about the inadequacies of this public process that allowed the Mackinac Straits Corridor Authority to convene without alerting the public to that information, nor providing the opportunity to review and provide comments on the information submitted to the MSCA. As a tribal citizen, the Great Lakes have profound cultural significance to my Tribe and myself. According to the oral histories of my people, the creation of North America began in the Straits of Mackinac - it is our Garden of Eden. The Straits are more than a waterway, they are a place of ongoing spiritual significance to the way of life and should be protected, preserved, and recognized as such. As we know, a renowned archaeologist at the University of Michigan, Dr. John O'Shea, notified Michigan's State Historic Preservation Office that he was contacted by a whistleblower technician involved in the previously completed cultural resources survey; the whistleblower explained that Enbridge's cultural survey ignored relevant evidence of prehistoric use, even after the technician identified the evidence and asked for permission to speak with Dr. O'Shea. The MSCA should not be moving forward on this project until Enbridge Energy completes a cultural resource survey for the upland and bottomland areas within the Strait of Mackinac. Potential project impacts to all cultural sites should be assessed by Enbridge FIRST not AFTER. Thank you for your time today.</p>	Ryan Gravelle
41	<p>Pipelines and the Tunnel Project do not have to run through the Great Lakes Straights. The oil and gas industry is dwindling out. A project like this may generate income for a few more years, but the cost, cons, and risk of the project outweigh the pros. The Great Lakes are more than just water. It's home to many, harbours a lot of wild life. Ecological disaster will effect more than just the surrounding area.</p>	Robert Assinewe
42	<p>My name is Kayla Perron. I am Anishinaabe, a Great Lakes Ojibwe and member of the Bay Mills Indian Community. I strongly oppose the liner 5 pipelines and the straits tunnel project. Destroying our lands and our waters is an attack on indigenous people and directly affects our communities first. It's threatening our ways of life to fill the pockets of corporations.</p>	Kayla Perron
43	<p>I think that an aged pipeline is too great of a risk to allow to continued operations in our Great Lakes.</p> <p>I do not believe that a tunnel is an appropriate work around, either. There is no guarantee that a tunnel will be sufficiently protecting our environment, because even new pipelines constructed in the last 10 years by Enbridge are leaking currently.</p> <p>There is too great of risks for environmental harm, and the subsequent economic harm that would befall the Great Lakes State, and no meaningful protections are in place to protect us, the citizenry, against the lobbying and back-room-deals paid for Enbridge.</p>	Joshua Hudson

44	This tunnel project should be halted, not moved forward. It's clear that our world is moving away from fossil fuels and into a future that will be cleaner and healthier (economically and physically). Sinking money into a new project this big does not make sense. Instead we should remove Line 5 from the Straits in accordance with Gov. Whitmer's decision to revoke Enbridge's easement, and NOT pursue any attempts to feed the link under the Straits.	Jadine S
45	My name is Chris Semrinec and am a current law student. I object both the continue operation of Line 5 and the building of the proposed tunnel project. I was born and raised on the Great Lakes in Grand Haven, MI and have felt a deep passion for the protection of the Great Lakes. This is also why I am dedicated to pursuing a career in environmental and natural resource law and policy. I do not support the proposed tunnel project because it continues to place one of Michigan's most precious resources at significant risk of a potential oil spill regardless of the proposed tunnel, there is still a substantial amount of risk associated with both the construction of the tunnel and the continued operation of Line 5.	Chris Semrinec
46	<p>Good afternoon, my name is Sharen Lange, and I address the Authority today with comments of support for Enbridge as a critical economic partner in Cheboygan County, and in favor of their Straits of Mackinac tunnel project. My qualifying touchpoints include: I am the chairman of the Cheboygan County Economic Development Corporation (EDC), President to the Cheboygan Economic Development Group (CEDG), serve on the Port of Cheboygan committee, am a multiple private business owner in downtown Cheboygan, I reside on the Cheboygan River, and am a lifetime recreational boater in the Straits of Mackinac and connecting waterways. As such, I have a wide variety and rounded perspective in regards to both the significant economic importance and impact of Enbridge and an intimate daily experience with the pristine waters of Michigan.</p> <p>As Cheboygan County's largest taxpayer (for some of our Townships, more than 50% of their operating budget) Enbridge is indisputably critical to the daily functions and economic health of Cheboygan communities. In addition to the blatantly obvious financial impact, as a County situated at the tip of the Mitt and the gateway to the Inland Waterway, Cheboygan most certainly supports clean water and the safety of the Great Lakes. That the energy supply of Line 5 need continue for the indisputable benefit of all of Michigan is obvious. Equally so, that the security and safety of the Tunnel Project to protect our waters by replacing Line 5 with the very best of global technology is equally obvious. Thank you for the opportunity to comment and reiterate Cheboygan County's support of Enbridge and the Tunnel from my service points.</p>	Sharen Lange, Chair Cheboygan County EDC

47	<p>David Holtz, on behalf of Oil &amp; Water Don't Mix, representing Michigan environmental, civic, business and tribal groups opposed to oil pipelines in the Great Lakes.</p> <p>It's been 11 months since the corridor authority held a public meeting. The Legislature created the Corridor Authority to "ensure that a utility tunnel is built to sufficient technical specifications..." It is subject to Michigan's Open Meetings Act.</p> <p>Over the past 11 months, without any public input, the state's public body charged with overseeing Enbridge's proposed tunnel design and construction has surrendered the public's interest to Enbridge's interest and delegated its responsibilities to others.</p> <p>The Corridor Authority is, in fact, a ghost public body with a multi-million budget that is being managed in the dark.</p> <p>At your last public meeting in March, 2020 in St. Ignace you were told by your consultant Mike Murray that any final tunnel design decision would be decided by the corridor authority (see 21.:49 in the video recording of corridor meeting).</p> <p>You haven't met since then let alone debated or decided a tunnel design in an open meeting. Instead, the design preferred by Enbridge is moving forward, a design that an independent open water tunnel expert says is cheaper for Enbridge to build but riskier for the Great Lakes.</p> <p>You have left whatever decisions are being made on the tunnel in the hands of MDOT and other state agency staff, consultants and Enbridge, without the kind of public scrutiny and accountability that comes with open meetings and decisions that the Legislature intended when it created the Corridor Authority.</p> <p>The fact that these decisions are being made in the dark also raises questions about whether Michigan's Open Meetings Act is being violated.</p> <p>Chairman Nystrom has signed nearly a half-million dollars in consulting contracts related to the corridor authority's tunnel oversight without any public input and opportunity to comment. And in the case of the McMillan Jacobs contract to advise on tunnel design, a state permitting authority--the Michigan Dept. of Environment, Great Lakes and Energy--announced the decision to hire. It created the impression that McMillan Jacobs was accountable to EGLE when, in fact, they were hired by the Corridor Authority, again without any opportunity for public input.</p> <p>Why is this an important distinction? Because the Corridor Authority was created by the Legislature to oversee tunnel implementation. Its clear mission as defined in Public Act 359 presumes that Enbridge's tunnel would be built. That is not</p>	David Holtz
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	<p>EGLE’s mission, which is to protect the Great Lakes. But EGLE’s tunnel consultants work for the Corridor Authority.</p> <p>Is this a conflict of interest? Was this arrangement to use Corridor Authority funds to hire consultants to “independently” evaluate Enbridge’s tunnel design in the public interest?</p> <p>Those questions should have been debated and decided in the light. Instead they were decided in the dark without debate or public disclosure.</p>	
48	FYI, the livestream is echoing everything you say	
49	There is a significant amount of echo on the livestream	Eric Andrews
50	Plz fix your audio it is very hard to hear because everything is echoing and repeating back	
51	<p>I attempted to put this in the comment section of the livestream but that box is character limited and I would have to submit one sentence at a time. I comment from my personal capacity as a lifelong resident of Michigan and a consumer of this state’s natural resources. Any action but complete decommission of pipelines from the Great Lakes water system is a continued risk. The use of Line 5 is not important to Michigan residents compared to what we risk losing. The current structure is delicate, and we are racing against time. Building a tunnel just increases the risk of a spill. Tunnel construction will require ongoing maintenance as pipelines continue to decay, while decommissioning Line 5 poses zero risk. These waters and shorelines are part of the public trust, and as such, Line 5 compromises our rights to use, navigate, and sustain life from this trust resource. We have a duty to protect this trust resource for future generations of Michiganders, whose economy and health will be deeply destroyed by an oil spill. Over one million gallons of oil have already been spilled across Michigan and Wisconsin since 1968 – the conversation isn’t about “if” the line leaks – it is about when it will. While I respect the need to provide for the energy needs of Northern Michigan, necessity breeds innovation. Our state resources are better spent developing new energy options than being invested in a failing oil system. It is now absolutely necessary to protect our water, shoreline, residents, and wildlife because any risk of a leak or spill (which we know is inevitable with time) is too high to warrant anything we gain from continuing to use Line 5. Finally, any decisions made about Line 5 should center the voices of Michigan’s indigenous tribes, which have been knowledgeable and skilled stewards of our water and wildlife since time immemorial.</p>	Emily Paski

52	<p>This comment is submitted by Jim Olson, President and Legal Advisor, on behalf of For Love of Water (FLOW), Great Lakes, Public Trust, Water and Natural Resources Law and Policy Center. My public comment is as follows:</p> <p>Statement before the Mackinac Straits Corridor Authority</p> <p>Re: Line 5 Easement, Assignment, Tunnel Agreement, and 99-year lease Public Meeting, Feb. 3, 2021 Jim Olson, President and Legal Advisor For Love of Water (FLOW)</p> <p>FLOW and many organizations, appeared and testified before this Authority on Friday, March 6, 2020. At that time, FLOW submitted a legal analysis and comment, dated March 5, 2020, and on March 6, 2020 made an oral presentation to the Authority that is part of the record in this matter. I realize that there are new members of the Authority, so, I have attached a copy of this analysis in the “Chat Box” for your convenience and because of the limited time for public comment at this meeting. Without waiving the several points contained in FLOW’s analysis and comments, today, I want to underscore the fact and law that the DNR Easement, the Assignment from you to Enbridge, and the Tunnel Agreement provisions calling for a 99-year lease have not been authorized under the rule of law of the public trust doctrine:</p> <ol style="list-style-type: none"> <li>1. These documents are subject to the GLSLA, 324.32502-32508 and rules, but to date the agreements and conveyance documents have not been authorized under the GLSLA;</li> <li>2. The DNR Tunnel right of way or Easement purports to be authorized under Act 10, now MCL 324.2129, for a public utility easement. However, the DNR has never authorized it based on the required findings under the public trust doctrine, an absolute necessity based on the position of the State, AG Nessel, and DNR in the Ingham County cases: Nessel v Enbridge; and State Governor and DNR Director v Enbridge.</li> </ol> <p>Until this authority is obtained by Enbridge, no contracts should be signed, no monies spent, and no construction commenced; to do so, would be at MSCA’s and Enbridge’s own risk. For this reason, you, the members of MSCA, are requested, respectfully, to ask for an Opinion of Attorney General Dana Nessel, on the serious question of the lack of required authorization of the 2018 Easement, the Assignment of Easement, and the Tunnel Agreement/99-Year Lease Agreement for occupancy and use of the State’s sovereign public trust bottomlands and waters of the Great Lakes.</p> <p>Thank you. Should you have any questions, or your AG staff have questions, we remain available to discuss the same.</p> <p>Jim Olson jim@flowforwater.org</p>	Jim Olson
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53	<p>I'm mostly limiting my comments to the values of good governance and open meetings for this section.</p> <p>The Mackinac Straits Corridor Authority has not publicly met in almost a year. It was said on this call that MSCA was allowed to move forward on key decisions without public meetings, and also said it would have been nice to have public meetings, but no actual reason was given for NOT having a public meeting. What was the actual reason for not having a public meeting when these contracts were executed and other decisions were made? Other state agencies continued to have public meetings -- with actual opportunities for people to make comments -- throughout the pandemic.</p> <p>In addition, considering that it's been near a year since the MSCA has met, it seems to me that there was plenty of time to give more than adequate notification that this meeting today was scheduled as well as to provide documents for the public and other key experts to review before the meeting. The contracts with McMillan Jacobs or Enbridge's presentation slides, for example. As far as I can tell, the public was notified last Friday, January 29th. Why couldn't notification have been provided with two weeks' notice, even if the meeting had to be held in the next two weeks?</p> <p>But what might be most concerning is how this meeting has handled the public comment. I understand that there are limitations from covid-19 and other factors. But requiring people to listen and analyze the information provided during the meeting and THEN compose their 3 minute comments in writing, to be read aloud, does not represent good government or consistent with open meetings principles, in my humble opinion. There was not even the bare minimum of guidance in terms of how many words might be considered a three minute comment.</p> <p>I'm very disappointed in the lack of transparency I've seen from the Mackinac Straits Corridor Authority, so say the least. The lack of transparency only furthers the perception that this body is only concerned with making sure the tunnel project happens, even while other agencies and entities evaluate whether the project is in the public interest of Michigan in the first place...given that this project, which will realistically blow past Enbridge's 4 to 5 year construction timeline, will be a liability and future stranded asset for the state of Michigan given the strong trends we are seeing in the energy industry and government policy.</p> <p>As I was writing this, I just heard on the call that the Mackinac Straits Corridor Authority members thought that there were thousands of geotechnical borings. That does not inspire confidence that the MSCA is paying close attention. The borings are a fundamental piece of this project and discussed at length in EGLE meetings and elsewhere. In fact, in the documents released around the EGLE permitting decision process, the McMillan reports indicated that the number of</p>	Bentley Johnson
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	<p>geotechnical borings were NOT sufficient. In EGLEs response to concerns about the lack of borings, EGLE said that the lack of borings was a business risk, not an environmental risk. Which is contradictory on its face and of grave concern for the taxpayers of Michigan and our economy given the high stakes of a catastrophic incident during construction or operation of the tunnel.</p> <p>Given the nature of the public comment, who knows what other issues will be raised that I would've liked to comment on before submitting this written comment, which has taken up most of the meeting for me to write.</p>	
54	<p>These comments are on behalf of Beth Wallace with the National Wildlife Federation.</p> <p>First, we support the concerns and questions raised by the Oil and Water Don't Mix Coalition and request response to the questions.</p> <p>It has been clear for the past 5 years that public engagement on Line 5 is critical and to-date the Mackinac Straits Corridor Authority appears to be conducting critical businesses outside of requirements found in the Michigan's Open Meetings Act. In addition, the activities that happened behind closed doors draw real questions around intent and only build on the lack of trust for this process and this project.</p> <p>This authority is not providing the public sufficient information on decision making and has failed to justify decisions that have been made in the past 11 months. It appears your authority is blaming COVID-19 for the closed door activity, but many other agencies/decision-making-bodies have worked through public meeting challenges given COVID - this is not an excuse for keeping these major decisions out of public view and moving forward for a project that has immense risk to our Great Lakes. If COVID was a challenge to public engagement, then decision making needed to cease.</p> <p>Reasons why the public can't be shut out of the process:</p> <ul style="list-style-type: none"> <li>-The geotechnical analysis are not sufficient and experts in the public, including retired state agency personnel and independent tunneling experts, have spoken out about this in detail;</li> <li>-Enbridge has not provided a proper risk registry for this project, including what would happen if there's a collapse of the tunnel or a frac-out;</li> <li>-Enbridge has not provided a plan for mitigation of risks or provided a sufficient review of impacts from construction;</li> </ul> <p>Even in this very meeting, Enbridge was unable to answer very basic questions regarding mishaps that could happen and it was clear that members of this authority are not aware of basic facts around the geotechnical failures of Enbridge's analysis, including the number of boring samples they took which have</p>	Beth Wallace



	<p>been noted by tunneling experts as insufficient.</p> <p>The National Wildlife Federation also has concerns around the various agencies sharing/using the same experts for decision making and review, especially when those experts are helping Enbridge with design and especially when the public is being limited or removed all together (as it has been in this case). Again, this does not instill trust in the process or the project.</p> <p>Finally, the way in which you're collecting public comment for this meeting is not at all sufficient and we encourage you to post presentation materials ahead of the meeting as well as give the public an opportunity to speak openly.</p>	
55	<p>Will you be using hydrovac vacuum excavation on this project?</p> <p>Who is a good contact to discuss this further?</p>	Sean Shepherd
56	The 2/3/2021 meeting has a chat function but no one involved in the meeting is monitoring or picking up the questions. Isn't that required under "open meetings" law?	jack segal
57	One speaker referred to using patrol boats as one of three safety measures to monitor the integrity of the tunnel. How would that function be covered in storms, icing or other severe conditions?	jack segal
58	The presentation today 2/3/2021 seemed entirely to consist of advocates of the tunnel and interested parties. The Governor is opposed. Was she invited to send a representative to provide other opinions?	jack segal
59	If the Enbridge pipeline leaks within the tunnel, what is the plan for preventing leakage into the lake?	jack segal
60	<p>For your convenience, here is a direct link to FLOW's March 5-6 comments, <a href="https://forloveofwater.org/wp-content/uploads/2020/03/FLOW-Letter-to-MSCA-2020.03.05">https://forloveofwater.org/wp-content/uploads/2020/03/FLOW-Letter-to-MSCA-2020.03.05</a>, to the MSCA on the serious question of lack of authorization of the easement, assignment of easement, and 99-year lease as required by the Great Lakes Submerged Lands Act and Act 10, MCL 324.2129, and the requirements for determinations for authorization under public trust law. Since March 6, 2020, the Attorney General and State of Michigan have concluded that public trust authorization and determinations apply, and that any conveyance, easement, or lease is void or of no legal effect in the absence of that authorization. Again, thank you for your serious consideration, and we urge you to seek an Opinion from Attorney General Dana Nessel before you proceed with any material commitments, expenses, or other obligations, or expressly condition any such matters on such required authorization under the GLSLA, Act 10, and public trust law.</p>	Jim Olson

61	The Governor and AG are engaged in legal efforts to shut down Line 5 and, I believe, prevent the construction of the tunnel. Isn't MDOT under the Governor's authority? At today's meeting, MDOT seems very much to be an advocate. Is that appropriate?	jack segal
62	Match-E-Be-Nash-She-Wish Band of Potawatomi does not support the Enbridge tunnel going through the Straits. We support the 12 federally recognized Michigan tribes' objections to this construction project. We would like to reserve our right to further consultation and comments.	Jodie Palmer